OCT - 9 1954

UNIVERSITY OF NORTH CAROLINA
EXTENSION BULLETIN

VOL. XXXIV SEPTEMBER, 1954 No. 1

HIGH SCHOOL WORLD PEACE STUDY AND SPEAKING PROGRAM

"THE ROLE OF THE UNITED NATIONS IN THE BUILDING OF WORLD PEACE"

Compiled by
E. R. RANKIN

Peace Handbook
1954-55

THE UNIVERSITY OF NORTH CAROLINA PRESS

CHAPEL HILL MCMLIV

Vol.	XXIV, No. 4	*Lectures in the Humanities.* First Series. Price 50c.
Vol.	XXVI, No. 1	*University Extension in Action.* By Russell M. Grumman. Price $1.00
Vol.	XXVI, No. 3	*Lectures in the Humanities.* Second Series. Price 50c.
Vol.	XXVII, No. 2	*Lectures in the Humanities.* Third Series. Price 50c
Vol.	XXVIII, No. 3	*Lectures in the Humanities.* Fourth Series. Price 50c.
Vol.	XXIX, No. 2	*Building World Peace in the Atomic Age: What Are the Responsibilities of the United States in the United Nations and in the Atlantic Pact?* Peace Handbook. Compiled by E. R. Rankin. Price 50c.
Vol.	XXIX, No. 3	*Lectures in the Humanities.* Fifth Series. Price 50c
Vol.	XXX, No. 1	*Lectures in the Humanities.* Sixth Series. Price 50c.
Vol.	XXXI, No. 2	*Building World Peace: What Is the Responsibility of the United States in the Light of Communist Aggression?* Peace Handbook. Compiled by E.R. Rankin. Price 50c.
Vol.	XXXI, No. 3	*Lectures in the Humanities.* Seventh Series. Price 50c.
Vol.	XXXI, No. 4	*Program Services.* Free.
Vol.	XXXII, No. 2	*Building World Peace: What Have Been the Achievements and What Are the Prospects of the United Nations?* Peace Handbook. Compiled by E. R. Rankin. Price 50c.
Vol.	XXXII, No. 3	*Lectures in the Humanities.* Eighth Series. Price 50c.
Vol.	XXXII, No. 4	*The Strange Journey: A Demonstration Project in Adult Education in Prison.* By Richard McCleery. Price 50c.
Vol.	XXXIII, No.1	*Correspondence Instruction.* Free.
Vol.	XXXIII, No. 1	Extra Edition. *Audio-Visual Aids to Schools, Colleges, Churches and Adult Study Groups.* Price 50c.
Vol.	XXXIII, No. 2	*Building World Peace: How Can the United Nations Prevent Communist Aggression and Preparation for Aggression?* Peace Handbook. Compiled by E. R. Rankin. Price 50c.
Vol.	XXXIII, No. 3	*Lectures in the Humanities.* Ninth Series. Price 50c.
Vol	XXXIII, No. 4	*Producing America's Outdoor Dramas.* By Samuel Selden. Price 50c.
Vol.	XXXIV, No. 1	*The Role of the United Nations in the Building of World Peace.* Peace Handbook. Compiled by E. R. Rankin. Price 50c.

MONEY ORDERS, CHECKS OR STAMPS ACCEPTED
ADDRESS: UNIVERSITY EXTENSION DIVISION
CHAPEL HILL, N. C.

UNIVERSITY OF NORTH CAROLINA
EXTENSION BULLETIN

VOL. XXXIV SEPTEMBER, 1954 No. 1

HIGH SCHOOL WORLD PEACE STUDY AND SPEAKING PROGRAM

"THE ROLE OF THE UNITED NATIONS IN THE BUILDING OF WORLD PEACE"

Compiled by
E. R. RANKIN

Peace Handbook
1954-55

Published four times a year, September, November, January, and March, by the University of North Carolina Press.
Entered as second-class matter October 19, 1921
Chapel Hill, N.C.,

Digitized by the Internet Archive
in 2012 with funding from
University of North Carolina at Chapel Hill

http://www.archive.org/details/universityofnc3419541955

CONTENTS

		Page
1.	Purpose and Policy, by O. K. Merritt	4
2.	Foreword, by E. R. Rankin	5
3.	Rules and Suggestions	6
4.	Endorsement, by Governor William B. Umstead	8
5.	Endorsement, by State Supt. Chas. F. Carroll	8
6.	Endorsement, by the N. C. General Assembly	9
7.	Address, by President Dwight D. Eisenhower	10
8.	Address, by Ambassador Henry Cabot Lodge, Jr.	15
9.	Address, by Secretary of State John Foster Dulles	22
10.	50 Facts About the United Nations	27
11.	Address, by Secretary-General Dag Hammarskjold	32
12.	Address, by Ambassador James J. Wadsworth	36
13.	Address, by Deputy Assistant Secretary of State David W. Wainhouse	40
14.	Address, by Deputy Under Secretary of State Robert Murphy	43
15.	Address, by Ambassador Henry Cabot Lodge, Jr.	45
16.	Address, by Under Secretary of State Walter B. Smith	47
17.	Address, by Assistant Secretary of State David McK. Key	48
18.	Address, by Secretary of State John Foster Dulles	49
19.	Bibliography	50
21.	Films About the United Nations	52
22.	N. C. Information Center for the United Nations	52

PURPOSE AND POLICY

By Oscar K. Merritt, *Mount Airy, N. C.*

Business Man, Originator of this Program

The boys and girls in our high schools today, tomorrow must take over the leadership, not only of our own nation, but to a large extent of the entire world.

Has any generation ever faced so great a responsibility?

Are we giving our young people the information and training they will need?

The purpose of this Program is to stimulate interest and furnish information on the problems of World Peace. We aim to reach not only high school pupils, but through them the masses of our people, upon whose collective conviction eventual World Peace must hinge.

> "The sum total of the common sense of the common people is the greatest and soundest force on earth."—*Thomas Jefferson.*

High schools are in position to lead public thinking in their communities. Therefore, this Program of study and public speaking on World Peace is being offered to the high schools of our State and the Nation.

The Program supports no one controversial thesis, but presents various points of view in unbiased consideration.

All persons and organizations desiring peace are invited and urged to help promote this Program in the high schools of their communities.

"For I dipt into the future, far as human eye could see,
Saw the Vision of the world, and all the wonder that would be;

"Saw the heavens fill with commerce, argosies of magic sails,
Pilots of the purple twilight, dropping down with costly bales;

"Heard the heavens fill with shouting, and there rain'd a ghastly dew
From the nations' airy navies grappling in the central blue;

"Far along the world-wide whisper of the south-wind rushing warm,
With the standards of the peoples plunging thro' the thunder-storm;

"Till the war-drum throbb'd no longer, and the battle-flags were furl'd
In the Parliament of man, the Federation of the world.

"There the common sense of most shall hold a fretful realm in awe,
And the kindly earth shall slumber, lapt in universal law."

From *Locksley Hall*

By Alfred, Lord Tennyson

FOREWORD

The University Extension Division of the University of North Carolina takes pleasure in announcing the Ninth Annual High School World Peace Study and Speaking Program. This Program exists for the purpose of encouraging the study and discussion of ways and means of building and maintaining just and lasting peace.

Two hundred and three high schools took part in the Program of 1946-47 on the subject: "Is World Government the Path to Peace?"; 189 high schools participated in the Program of 1947-48 on the subject: "How Can the United Nations Be Strengthened?"; 182 high schools took part in the Program of 1948-49 on the subject: "What is the Responsibility of the United States in World Affairs?"; 200 high schools participated in the Program of 1949-50 on the subject: "Building World Peace in the Atomic Age: What Are the Responsibilities of the United States in the United Nations and in the Atlantic Pact?"

One hundred and ninety-two high schools took part in the Program of 1950-51 on the subject: "How Can We Help to Build World Peace in the Atomic Age?"; 223 high schools took part in the Program of 1951-52 on the subject: "Building World Peace: What Is the Responsibility of the United States in the Light of Communist Aggression?"; 244 high schools participated in the Program of 1952-53 on the subject: "Building World Peace: What Have Been the Achievements and What Are the Prospects of the United Nations?"; and 202 high schools took part in the Program of 1953-54 on the subject: "Building World Peace: How Can The United Nations Prevent Communist Aggression and Preparation for Aggression?"

The central topic for this year's Program is: "The Role of the United Nations in the Building of World Peace." Various responsible points of view are outlined in the articles carried in the bulletin and in the references listed in the bibliography. The individual students should study all of the material available and should present in their speeches their own respective points of view on the subject for the year.

This Program has received endorsement by various organizations, including the N .C. Bar Association, the N. C. Federation of Women's Clubs, the N. C. Congress of Parents and Teachers, and the N. C. Junior Chamber of Commerce; by public officials, including three Governors of North Carolina and two State Superintendents of Public Instruction; and by the N. C. General Assembly of 1947.

Appreciation is expressed to Oscar K. Merritt, originator and generous supporter of the Program, and to all whose addresses or articles appear in reproduced form in the handbook.

The attention of all interested in world peace is invited to the Rules and Suggestions which outline generally the procedures to be followed in making this Program successful.

E. R. Rankin
Director of the Program

RULES AND SUGGESTIONS

1. This Program is open to all high schools that will conduct it in accord with its basic intent and principles.

2. The Program shall be sponsored in each high school either by the school itself or by a suitable organization or individual acceptable to the local school administration.

3. The high school principal shall appoint one member of the faculty as supervisor of the Program in the school. It is suggested that the supervisor be assisted by a committee representing the school administration, the sponsor, and the student body.

4. Each participating high school shall encourage as many as possible of its students to study the literature available and to write speeches on the subject specified.

5. It is strongly recommended that the Peace Handbook be assigned for special study or as a special project in connection with suitable high school courses. The vast majority of the participating high schools have used the Peace Handbook in connection with one or more of the following courses: English, History, Social Studies, Public Speaking, Government, Sociology, Civics, and Dramatics.

6. Each school shall select, by fair and suitable methods, not less than three nor more than six of its students to speak in a final public local contest. This selection is usually based first on required papers on the the subject and second on speaking ability of the students.

7. Each speech shall be not less than 6 minutes nor more than 12 minutes in length.

8. Each contestant shall prepare and deliver his own speech. He shall be entitled to oral assistance in preparation of the speech and in practicing delivery, and may use materials from any source available. All speeches must be the original composition of the individual student, and all quoted materials must be duly acknowledged. Contestants are usually permitted to have their papers before them as they speak.

9. Each high school administration and each sponsor should enlist the aid of local churches, civic organizations, the press, radio, and all other suitable mediums to publicize the contest.

10. The final public speaking contest in each school shall be held at the earliest convenient date within the school year 1954-55. (The contest date is left flexible to accommodate the Peace Program to use in connection with courses of study.)

11. The winner in each contest shall be selected by a suitable committee of judges.

12. The University of North Carolina Extension Division at Chapel Hill shall supervise the Program and serve as a "clearing house," preparing and distributing background materials and ordering for the spon-

sors the "World Peace" Gold Keys to be presented to the winners. (Additional "clearing houses" may be set up in other states.)

13. Each registering school shall fill out the proper registration blank and send it, accompanied by the registration fee ($5.00 for North Carolina schools and $7.50 for schools outside North Carolina) to the University Extension Division at Chapel Hill. For this fee the Extension Division will supply the school with 20 copies of the Handbook and the "World Peace" Gold Key. From various adult civic clubs or other groups in the city or county, sponsors can be secured readily in most instances and in all such cases the sponsors will provide the fee. At the same time, the school can pay the registration fee from its own activity fund. In any event, the interest of adult clubs and other groups and organizations within the community is to be enlisted to the maximum extent possible.

14. At the conclusion of the speaking contest, each school shall send to the University Extension Division at Chapel Hill a report of results, giving the name of the winner, the estimated attendance, the number of speakers, and a copy of the winning speech.

15. While it is contemplated that this contest ends when a winner has been designated for each high school, continued competition may be held whenever desired among winners from various high schools. Rules and awards for any such additional contests shall be arranged by those conducting them.

16. The school administration and the sponsor shall use all suitable means for publicizing the results of the contest, such as having outstanding speeches published in full in the local press and broadcast over the radio. Special efforts should be made to arrange for the contestants to deliver their speeches before various local adult groups and organizations.

17. At the public contest, the presiding officer should explain the primary objective of the Program.

18. It is felt that, in the judging of speeches, consideration should be given particularly to content, organization, and delivery. As a very general guide, it is suggested: (1) that the judges place 50 per cent value on content of the speech (with emphasis on logical, well-thought out material directly related to the subject); (2) that they place 25 per cent value on organization of material (with emphasis on logical and literary arrangement); and (3) that they place 25 per cent value on delivery.

19. The "World Peace" Gold Key should be presented to the winner immediately after the decision has been announced.

20. In so far as local methods of procedure are concerned, these rules may be revised, when necessary, to fit the local situation.

NOTE: The registration fees paid by the local sponsors do not cover the cost of operating the Program. The deficit is underwritten and paid by the High School World Peace Study and Speaking Program, Inc., a non-profit corporation whose officers and directors are business men of Mount Airy, N. C.

ENDORSEMENT BY GOVERNOR WILLIAM B. UMSTEAD

To High School Principals and Teachers:

The Extension Division of the University of North Carolina at Chapel Hill is now planning its ninth year's Program with reference to ways and means of building and maintaining world peace. The subject for this year's Program will be: "The Role of the United Nations in the Building of World Peace."

The results of this Study and Speaking Program have been outstanding and many high school students from every section of North Carolina have participated. I consider it a worthwhile and effective means of generating interest among our young people in the crucial problems relating to world peace.

It is my hope that our high school students will again participate in large numbers in the 1954-55 Program. In my opinion, the efforts of the United Nations to achieve world peace are worthy of study by every high school student.

With best wishes, I am

Sincerely yours,
WILLIAM B. UMSTEAD
Governor of North Carolina

August 9, 1954

ENDORSEMENT BY STATE SUPT. CHAS. F. CARROLL

To High School Principals and Teachers

Greetings:

In the interest of developing an intelligent, informed citizenry with a concern for building world peace I commend for your consideration the subject selected for discussion in the High School World Peace Study and Speaking Program for the 1954-55 school year: "The Role of the United Nations in the Building of World Peace." Intelligent participation in a united effort to build world peace requires a background of knowledge and understanding of world problems such as, "How Could the Functioning of the United Nations Help Bring About World Peace?" and "What Part Can the United States Play in the United Nations in Building World Peace?" Exploration of this year's topic offers many possibilities for increasing knowledge and understanding of world problems, and for developing a deeper appreciation for the democratic way of life.

The United Nations and our Nation are deeply concerned with this problem of building world peace. Since the solution concerns every North Carolinian, in my opinion, it is especially important for us to discuss this subject. For this reason I endorse this Program.

With all good wishes, I am

Cordially yours,
CHAS. F. CARROLL
State Superintendent of Public Instruction

August 5, 1954

ENDORSEMENT BY THE N.C. GENERAL ASSEMBLY

A joint Resolution Endorsing a "High School World Peace Speaking Program" in the High Schools of North Carolina.

Whereas, it is realized that public discussion of proposals leading to the establishment of a just and adequate system under which the peoples of the world may live in peace by and under the law is of primary importance to the world today; and

Whereas, a "High School World Peace Speaking Program" is being conducted in the High Schools of North Carolina under the general supervision of the University of North Carolina which program has for its purpose the stimulating of interest in world peace among the masses of our people; and

Whereas, the said program is being conducted in more than two hundred High Schools in North Carolina this year, thereby reaching thousands of our people; and

Whereas, the said "High School World Peace Speaking Program" was organized by citizens of North Carolina and is a non-profit enterprise which has been officially endorsed by the North Carolina League of Municipalities, the North Carolina Education Association, the North Carolina State Parents and Teachers Asociation, the State Federation of Women's Clubs, by many civic and religious organizations and by Governor R. Gregg Cherry; Now, Therefore

Be it Resolved by the House of Representatives, the Senate concurring:

Section 1: That the General Assembly of North Carolina commends the High Schools of North Carolina, the Extension Division of the University of North Carolina, the school teachers of our State who are participating in and encouraging the said "High School World Peace Speaking Program" and all public spirited citizens who have lent their assistance toward the success of this movement and commends the same to the citizenship of the State and to all peoples interested in an early establishment of a just and permanent world peace.

Section 2. That this resolution shall be in full force and effect from and after its ratification. (Joint Resolution H. R. 945, Ratified April 5, 1947)

ATOMIC POWER FOR PEACE

(Excerpts from an address by President Dwight D. Eisenhower before the General Assembly of the United Nations, United Nations Headquarters, December 8, 1953.)

When Secretary General Hammarskjold's invitation to address this General Assembly reached me in Bermuda, I was just beginning a series of conferences with the Prime Ministers and Foreign Ministers of Great Britain and of France. Our subject was some of the problems that beset our world.

During the remainder of the Bermuda Conference, I had constantly in mind that ahead of me lay a great honor. That honor is mine today as I stand here, privileged to address the General Assembly of the United Nations.

At the same time that I appreciate the distinction of addressing you, I have a sense of exhilaration as I look upon this Assembly.

Never before in history has so much hope for so many people been gathered together in a single organization. Your deliberations and decisions during these somber years have already realized part of those hopes.

But the great tests and the great accomplishments still lie ahead. And in the confident expectation of those accomplishments, I would use the office which, for the time being, I hold, to assure you that the Government of the United States will remain steadfast in its support of this body. This we shall do in the conviction that you will provide a great share of the wisdom, the courage, and the faith which can bring to this world lasting peace for all nations, and happiness and well being for all men.

Clearly, it would not be fitting for me to take this occasion to present to you a unilateral American report on Bermuda. Nevertheless, I assure you that in our deliberations on that lovely island we sought to invoke those same great concepts of universal peace and human dignity which are so cleanly etched in your Charter.

Neither would it be a measure of this great opportunity merely to recite, however hopefully, pious platitudes.

A Danger Shared by All

I therefore decided that this occasion warranted my saying to you some of the things that have been on the minds and hearts of my legislative and executive associates and on mine for a great many months—thoughts I had originally planned to say primarily to the American people.

I know that the American people share my deep belief that if a danger exists in the world, it is a danger shared by all— and equally, that if hope exists in the mind of one nation, that hope should be shared by all.

Finally, if there is to be advanced any proposal designed to ease even by the smallest measure the tensions of today's world, what more appropriate audience could there be than the members of the General Assembly of the United Nations?

I feel impelled to speak today in a language that in a sense is new—one which I, who have spent so much of my life in the military profession, would have preferred never to use.

That new language is the language of atomic warfare.

The atomic age has moved forward at such a pace that every citizen of the world should have some comprehension, at least in comparative terms, of the extent of this development, of the utmost significance to every one of us. Clearly, if the peoples of the world are to conduct an intelligent search for peace, they must be armed with the significant facts of today's existence.

My recital of atomic danger and power is necessarily stated in United States terms, for these are the only incontrovertible facts that I know. I need hardly point out to this Assembly, however, that this subject is global, not merely national in character.

The Fearful Potentials

On July 16, 1945, the United States set off the world's first atomic explosion.

Since that date in 1945, the United States of America has conducted 42 test explosions.

Atomic bombs today are more than 25 times as powerful as the weapons with which the atomic age dawned, while hydrogen weapons are in the range of millions of tons of TNT equivalent.

Today, the United States' stockpile of atomic weapons, which, of course, increases daily, exceeds by many times the explosive equivalent of the total of all bombs and all shells that came from every plane and every gun in every theatre of war in all of the years of World War II.

A single air group, whether afloat or land-based, can now deliver to any reachable target a destructive cargo exceeding in power all the bombs that fell on Britain in all of World War II.

In size and variety, the development of atomic weapons has been no less remarkable. The development has been such that atomic weapons have virtually achieved conventional status within our armed services. In the United States, the Army, the Navy, the Air Force, and the Marine Corps are all capable of putting this weapon to military use.

But the dread secret, and the fearful engines of atomic might, are not ours alone.

In the first place, the secret is possessed by our friends and allies, Great Britain and Canada, whose scientific genius made a tremendous contribution to our original discoveries, and the designs of atomic bombs.

The secret is also known by the Soviet Union.

The Soviet Union has informed us that, over recent years, it has devoted extensive resources to atomic weapons. During this period, the Soviet Union has exploded a series of atomic devices, including at least one involving thermonuclear reactions.

No Monopoly of Atomic Power

If at one time the United States possessed what might have been called a monopoly of atomic power, that monopoly ceased to exist

several years ago. Therefore, although our earlier start has permitted us to accumulate what is today a great quantitative advantage, the atomic realities of today comprehend two facts of even greater significance.

First, the knowledge now possessed by several nations will eventually be shared by others—possibly all others.

Second, even a vast superiority in numbers of weapons, and a consequent capability of devastating retaliation, is no preventive, of itself, against the fearful material damage and toll of human lives that would be inflicted by surprise aggression.

The free world, at least dimly aware of these facts, has naturally embarked on a large program of warning and defense systems. That program will be accelerated and expanded.

But let no one think that the expenditure of vast sums for weapons and systems of defense can guarantee absolute safety for the cities and citizens of any nation. The awful arithmetic of the atomic bomb does not permit of any such easy solution. Even against the most powerful defense, an aggressor in possession of the effective minimum number of atomic bombs for a surprise attack could probably place a sufficient number of his bombs on the chosen targets to cause hideous damage.

Should such an atomic attack be launched against the United States, our reaction would be swift and resolute. But for me to say that the defense capabilities of the United States are such that they could inflict terrible losses upon an aggressor—for me to say that the retaliation capabilities of the United States are so great that such an aggressor's land would be laid waste—all this, while fact, is not the true expression of the purpose and the hope of the United States.

To pause there would be to confirm the hopeless finality of a belief that two atomic colossi are doomed malevolently to eye each other indefinitely across a trembling world. To stop there would be to accept helplessly the probability of civilization destroyed—the annihilation of the irreplaceable heritage of mankind handed down to us generation from generation—and the condemnation of mankind to begin all over again the age old struggle upward from savagery toward decency, and right, and justice.

Surely no sane member of the human race could discover victory in such desolation. Could anyone wish his name to be coupled by history with such human degradation and destruction?

Occasional pages of history do record the faces of the "Great Destroyers" but the whole book of history reveals mankind's never ending quest for peace, and mankind's God-giving capacity to build.

It is with the book of history, and not with isolated pages, that the United States will ever wish to be identified. My country wants to be constructive, not destructive. It wants agreements, not wars, among nations. It wants itself to live in freedom, and in the confidence that the people of every other nation enjoy equally the right of choosing their own way of life.

No Idle Words or Shallow Visions

So my country's purpose is to help us move out of the dark chamber of horrors into the light, to find a way by which the minds of men, the

hopes of men, the souls of men everywhere, can move forward toward peace and happiness and well being.

In this quest, I know that we must not lack patience.

I know that in a world divided, such as ours today, salvation cannot be attained by one dramatic act.

I know that many steps will have to be taken over many months before the world can look at itself one day and truly realize that a new climate of mutually peaceful confidence is abroad in the world.

But I know, above all else, that we must start to take these steps—NOW.

The United States and its allies, Great Britain and France, have over the past months tried to take some of these steps. Let no one say that we shun the conference table.

On the record has long stood the request of the United States, Great Britain and France to negotiate with the Soviet Union the problems of a divided Germany.

On that record has long stood the request of the same three nations to negotiate an Austrian State Treaty.

On the same record still stands the request of the United Nations to negotiate the problems of Korea.

For the Benefit of Mankind

But I do not wish to rest either upon the reiteration of past proposals or the restatement of past deeds. The gravity of the time is such that every new avenue of peace, no matter how dimly discernible, should be explored.

There is at least one new avenue of peace which has not yet been well explored—an avenue now laid out by the General Assembly of the United Nations.

In its resolution of November 18, 1953, this General Assembly suggested and I quote—"that the Disarmament Commission study the desirability of establishing a sub-committee consisting of representatives of the Powers principally involved, which should seek in private an acceptable solution . . . and report on such a solution to the General Assembly and to the Security Council not later than 1 September 1954."

The United States, heeding the suggestion of the General Assembly of the United Nations, is instantly prepared to meet privately with such other countries as may be "principally involved", to seek "an acceptable solution" to the atomic armaments race which overshadows not only the peace, but the very life, of the world.

We shall carry into these private or diplomatic talks a new conception.

The United States would seek more than the mere reduction or elimination of atomic materials for military purposes.

It is not enough to take this weapon out of the hands of the soldiers. It must be put into the hands of those who will know how to strip its military casing and adapt it to the arts of peace.

The United States knows that if the fearful trend of atomic military buildup can be reversed, this greatest of destructive forces can be developed into a great boon, for the benefit of all mankind.

The United States knows that peaceful power from atomic energy is no dream of the future. That capability, already proved, is here—now —today. Who can doubt, if the entire body of the world's scientists and engineers had adequate amounts of fissionable material with which to test and develop their ideas, that this capability would rapidly be transformed into universal efficient, and economic usage.

To hasten the day when fear of the atom will begin to disappear from the minds of the people, and the governments of the East and West, there are certain steps that can be taken now.

Proposal for Joint Atomic Contributions

I therefore make the following proposals:

The Governments principally involved, to the extent permitted by elementary prudence, to begin now and continue to make joint contributions from their stockpiles of normal uranium and fissionable materials to an International Atomic Energy Agency. We would expect that such an agency would be set up under the aegis of the United Nations.

The ratios of contributions, the procedures and other details would properly be within the scope of the "private conversations" I have referred to earlier.

The United States is prepared to undertake these explorations in good faith. Any partner of the United States acting in the same good faith will find the United States a not unreasonable or ungenerous associate.

Undoubtedly initial and early contributions to this plan would be small in quantity. However, the proposal has the great virtue that it can be undertaken without the irritations and mutual suspicions incident to any attempt to set up a completely acceptable system of world-wide inspection and control.

The Atomic Energy Agency could be made responsible for the impounding, storage, and protection of the contributed fissionable and other materials. The ingenuity of our scientists will provide special safe conditions under which such a bank of fissionable materials can be made essentially immune to surprise seizure.

The more important responsibility of this Atomic Energy Agency would be to devise methods whereby this fissionable material would be allocated to serve the peaceful pursuits of mankind. Experts would be mobilized to apply atomic energy to the needs of agriculture, medicine, and other peaceful activities. A special purpose would be to provide abundant electrical energy in the power-starved areas of the world. Thus the contributing powers would be dedicating some of their strength to serve the needs rather than the fears of mankind.

The United States would be more than willing—it would be proud to take up with others "principally involved" the development of plans whereby such peaceful use of atomic energy would be expedited.

Of those "principally involved" the Soviet Union must, of course, be one.

Out of Fear Into Peace

I would be prepared to submit to the Congress of the United States, and with every expectation of approval, any such plan that would:

First—encourage world-wide investigation into the most effective peacetime uses of fissionable material, and with the certainty that they had all the material needed for the conduct of all experiments that were appropriate;

Second—begin to diminish the potential destructive power of the world's atomic stockpiles;

Third—allow all peoples of all nations to see that, in this enlightened age, the great powers of the earth, both of the East and of the West, are interested in human aspirations first, rather than in building up the armaments of war;

Fourth—open up a new channel for peaceful discussion, and initiate at least a new approach to the many difficult problems that must be solved in both private and public conversations, if the world is to shake off the inertia imposed by fear, and is to make positive progress toward peace.

Against the dark background of the atomic bomb, the United States does not wish merely to present strength, but also the desire and the hope for peace.

The coming months will be fraught with fateful decisions. In this Assembly; in the capitals and military headquarters of the world; in the hearts of men everywhere, be they governors or governed, may they be the decisions which will lead this world out of fear and into peace.

To the making of these fateful decisions, the United States pledges before you—and therefore before the world—its determination to help solve the fearful atomic dilemma—to devote its entire heart and mind to find the way by which the miraculous inventiveness of man shall not be dedicated to his death, but consecrated to his life.

WHAT THE UNITED NATIONS MEANS TO THE UNITED STATES

(Excerpts from an address by Ambassador Henry Cabot Lodge, Jr., U.S. Representative to the United Nations, at Williamsburg, Va., January 30, 1954, as carried in The Department of State Bulletin, volume 30, pages 252-256, February 15, 1954.)

It is a great honor to be speaking in this historic place before this important audience. Here, in this old colonial capitol, are symbolized events which gave birth to this country—events which are still as fresh, as vivid, and as contagious as they were on the day that Patrick Henry, standing on this very place, spoke out fearlessly, eloquently, immortally against tyranny and the forces of tyranny. Every day that goes by sees brave men coming through the Iron Curtain at the risk of their lives in search of freedom because, like Patrick Henry, they prefer death to slavery.

Coming from Massachusetts, in whose State House also events took place which played a vital part in the forming of this country, and as one who has served in the Legislature of the Commonwealth of Massachusetts, I naturally have a deep appreciation of what it means to address the Legislature of Virginia. You are the authentic voice of the sovereign people, and anyone occupying the office which I now hold must count it a privilege to be able to report to you.

Today, I ask you to look at the United Nations, to scrutinize its purposes, its achievements, its shortcomings, its utility, and its future promise—all with the utmost frankness. The times are far too serious for self-delusion. We must see this thing as it is—we must coolly appraise its value. We must ask ourselves the great question which we always ask ourselves in our official capacity as legislators: is it good for America?

In bluntest terms, the United Nations is an international device whose primary purpose is "to save succeeding generations from the scourge of war" by developing enough strength to deter aggression and, if in spite of the United Nations it should occur, to repel it.

It was created by a Charter, which was ratified by the Senate by a vote of 89 to 2 in 1945 at the close of the bloodiest war in history. It was invited to establish itself in the United States by a unanimous vote of the United States Congress and has its headquarters in New York City.

To promote peace, the Charter created a Security Council of 11 members which has the power, subject to the veto of any one of its 5 permanent members, in case of aggression to issue action orders which are legally binding on all United Nations members.

It also set up a General Assembly, which cannot issue orders but has power to debate and to recommend. In the General Assembly each of the 60 member nations has one vote, regardless of size.

When the United Nations was founded, it was assumed that the great allies of World War II would stay together to keep peace. But the Soviet Union became hostile to the free world and, by its abuse of the veto, caused the Security Council to become less and less active, with the result that the General Assembly has become the busy place. (A veto-proof method has at last been evolved for bringing a collective defense program into being by recommendations passed by a two-thirds vote of the General Assembly. When, as, and if aggression occurs in the future, we will no longer be paralyzed by the Communist abuse of the veto.)

This growth of the General Assembly is in many ways a sound development because a solid foundation for peace actually depends on two things: (1) the existence of common practical interests; and (2) the existence of a common sense of justice, which means a common sense of right and wrong and a common view of the relation of the individual to his government.

Until both of these things exist, those who insist on schemes for world union or world government do more harm than good because, like someone feeding fried potatoes to a newborn baby, they are trying to ram something down the throat of the world which it cannot digest. If any one of the 13 colonies, at the time of the American Revolution, had had a view of life as different from the rest of the world as the view of the Soviet Union is different from the free world today, there would have been no United States. The American revolutionists, unlike the people of the world today, all had the same general thoughts about the nature of man.

In the modern world there is already a growing knowledge that countries have many common practical interests. But the growth of a common sense of justice seems to come more slowly—and, as any effective scheme for world order depends on such a sense of justice, the es-

sential first step is a world forum where issues can be debated and put to a vote and where world public opinion can develop. The General Assembly is thus a place where they "talk and vote"—just as they do in any democratic assemblage—because it is by talking and voting that you sometimes avert war, and it is by talking and voting that you build a world sense of right and wrong.

The 60 member nations of the United Nations are a sizable majority of the world's nations and of the world's population. The General Assembly is, therefore, the indispensable first step—the necessary foundation for any future world order which mankind may wish to build. It is as far as we can go now. But we should go this far.

Accomplishments of the United Nations

The United Nations is a place where:

...public opinion is developed—and public opinion makes things happen in spite of iron curtains.

...we can see what the Communists are doing in the war of ideas—and sometimes in other ways. Without it we could not see nearly as much.

...you can get authoritative reactions quickly on the state of opinion in almost any part of the world, which it would take days, if not weeks, to get otherwise.

...Americans can see how their American public servants are conducting the American side of the cold war. It therefore enables us to correct our mistakes more quickly and with greater sureness than we could do otherwise.

...the free world gets consolidated. Being free, the non-communist nations naturally tend to go their own way and to drift apart. But sooner or later some Communist spokesman will make some statement that is so monstrous that you can almost see the free nations getting together before your very eyes. This more than counterbalances whatever advantages the Communists may get out of their propaganda.

...we have developed valuable allies—certainly not as many as we should have liked. But, equally certain, whatever allies we have are welcome and are that much clear gain.

...six of the member nations are peoples who were under alien control when the Charter was signed. Of the 800 million people in the free world who were dependent 10 years ago, some 600 million—or three-fourths—have won full independence since 1945. The newly independent countries which belong to the United Nations include India, Pakistan, Burma, the Philippines, Indonesia, and Israel.

...representatives of nations can meet without formality to settle disputes. Those who want to divide and rule are impeded, for this is a hard game to play when the entire free world is looking on.

...the threat of war in Iran in 1946, due to pressure of Russian troops, was moderated and gradually extinguished.

...the initiative was taken, with substantial American backing, to prevent Communist encroachment on Greece in 1947.

...open warfare over Kashmir between India and Pakistan was stopped.

...the advent of Israel into the family of nations was determined and an end put to a bloody war in the Holy Land, although the situation is still dangerous.

...working with the Netherlands and the Indonesians, full independence was given to the 76 million people inhabiting Indonesia.

...part of the free world was organized to repel the bloody aggression in Korea, which threatened the whole free world—and not only in Asia.

...the Kremlin has a real headache in the United Nations. They cannot control the United Nations; they cannot break it up; they dare not leave it.

What United Nations Is Not

The United Nations is not a world government. It cannot impose a tax of any kind. It cannot draft a single soldier—from any country for service in Korea or elsewhere. Its Charter specifically prohibits its intervention in domestic matters (article 2, paragraph 7). Your representative at the United Nations is called Ambassador by act of Congress, for the simple reason that he represents a sovereign state and not a political subdivision. It would, of course, be a manifest absurdity to give the large and small states each one vote in a body which had the powers of a government.

It is not a heavy burden on the United States taxpayer—16 cents per citizen in Year 11 of the Atomic Age. This is less than half of what is spent for the sanitation of the city of New York, or one-fourteenth of what is spent for cigarettes. The amount spent, according to The New York Times figures, by the United Nations, foreign delegations, and secretariat members living in New York far exceeds our annual contribution to the United Nations and the specialized agencies—and the American contribution was reduced both in percentage and in actual dollars at the last session of the General Assembly.

It does not threaten the destruction of our Constitution because, as the Supreme Court has said, "the treaty making power does not extend as far as to authorize what the Constitution forbids." There is only one organ of the United Nations which can take action which is legally binding. That is the Security Council and there the United States is completely protected by the veto. None of the other things the United Nations can do are anything but recommendatory.

It is not a nest of Communist spies, because there is nothing to spy on in the United Nations—which is why the Soviets haven't even filled their quota of employees. No United States citizen employed by the United Nations has ever been prosecuted for espionage. Every United States citizen employed there will within a few months have been screened in accordance with a Civil Service Commission-FBI plan. With so many good Americans to choose from there is no justification whatever for employing a single American in the United Nations who is a Communist.

It is not a snare which dragged the United States into the Korean war. The United States took the initiative in getting the United Nations to take action against the Communist aggressor in Korea.

It is certainly not a device which has had an unbroken record of successes. Far from it. It did not prevent the Communist victory in China.

Neither did the United States. Communist successes in other parts of the world have taken place in spite of the United Nations. Yet it not only survives but actually functions helpfully, though imperfectly, in spite of the fact that the Communist bloc is in a cold war with the rest of the world.

Its Future

The need for the United Nations is sure to grow rapidly as science progresses. Today, none of the 60 nations comprising the United Nations is able to maintain itself alone—except for the Soviet Union, which does it by harsh slave labor. The United States cannot exist without supplies far in excess of what we produce here. If we were denied as few as 20 essential materials we would be completely crippled economically. The whole of North America, with guided missiles and atomic weapons, can be crippled militarily. Maybe it was possible to get along without a place like the United Nations in the days when the four and one-half day boat to Europe was the quickest way to travel across the seas, although even in those days we got into two world wars. But a place like the United Nations is as necessary now in international politics as an airport in international travel.

It is perhaps because of this need that the United Nations, with all its faults, has been able, more than any other body in modern history, to organize peace and security—in spite of the great threats to peace and security at large in the world.

This is, undoubtedly, why war would be inevitable if the United Nations disappeared.

If war came in spite of the United Nations, it would then be the indispensable instrument for repelling the aggression—which is probably one reason why the Communists don't leave it.

This explains why men of good will throughout the world would be straining every nerve to create even the imperfect device which we have now if the United Nations did not exist.

Therefore there is a need for the United Nations, a need as real as the yearning of mankind no longer to send its sons off to slaughter.

Three questions have been raised in the United States with regard to the United Nations, and satisfactory answers to these questions must be given.

One concerns the loyalty of United States personnel on the payroll, and, as I have said, within a few months every American employed there will have been screened in accordance with the Civil Service Commission-FBI plan.

The second is that the Soviets used the United Nations to fight their cold war battles whereas the United States did not. This situation does not exist in the United Nations today. We follow the policy of actively using the United Nations as the one great world forum for international presentation and rebuttal. At the last session of the General Assembly we used it as a place in which the big truth could be used to demolish the big lie.

To give a few examples, Dr. Charles Mayo of the Mayo Clinic, who

was an American delegate, made a smashing demonstration of the diabolical falsity of the Communist charge that the United States has been using germ warfare in Korea. Other delegates focused the spotlight of world attention on forced labor behind the Iron Curtain and on treatment of World War II prisoners of war. I presented the dreadful story of Communist atrocities in Korea which so moved the General Assembly that it adopted a condemnatory resolution. In addition to these specific topics, we have adopted the practice of always answering a Communist speaker immediately so that no news story goes out of the United Nations to the world public consisting only of the Communist side. In that news story there is always something from the side of the free world.

In November the President came to the conclusion that, if the legilature of Puerto Rico adopted a resolution asking for complete independence, he would be glad to do all in his power to see that Puerto Rico got it. The President chose the United Nations as the place at which that announcement should be made. When it was made, it created great good will for the United States among Latin American countries and also in countries in Asia and Africa where the colonial question is a matter of active interest.

The third question asks whether it is true that the United States has given an undue proportion of manpower to the Korean war and that the other members of the United Nations have put in too little.

There is no doubt that the contribution of the United States to the war in Korea was of overriding importance and was in fact utterly indispensable. In combat manpower alone the contribution of the United States was far larger than that of any one country except the Republic of Korea—and it is the United States which trained and equipped the Republic of Korea army.

It is also true that the other United Nations members put up the equivalent of two divisions. Two United States divisions at World War II figures cost $600 million a year. The cost today is probably greater, but is a secret. If, therefore, the United States had had to furnish these two divisions, the added dollar cost would have been at least $600 million. When you compare that with our annual contribution of 25 million, you can see that on a financial basis alone the United Nations is not a bad deal.

Carrying the fiscal argument still further, remember that the most expert studies indicate that after every last bill has been paid, World War II will have cost us $1 trillion, 300 billion—which again makes our $25 million contribution to the United Nations seem smaller.

Of course, money is not the only, and not even the most important, consideration. If the United States had had to supply two more divisions there would have been that many more American casualties, that many more tragedies in American homes, which were instead suffered in homes of other countries whose brave men answered the call.

Many persons had the idea at the end of World War II that the United Nations would be an automatic peace producer—that a few gifted lawyers scattered around the world would draft a Charter; that this Charter would be ratified by the nations; that a handsome building

would be erected and that then the world would have an automatic device for peace.

No Automatic Device for Peace

The truth is that there is no automatic device for peace. If the United Nations is as automatic as a burglar alarm, it is doing well. But what happens after the bell rings is up to the members, and you will get results solely in proportion as you contribute. In the grim struggle for peace, the payments which must be made are not merely in money; they are chiefly in the service of men. In the face of something as critical as an impending war nothing less than human muscle, human hearts, and human service will do the job.

Rather than draft a Charter and then look for troops it might have been more logical at the time for the nations to have earmarked the troops and then drafted the Charter. But history is not always logical and we do progress.

In the struggle for peace, as in every other human endeavor, the success of the struggle depends directly on how hard you work, how deeply you sacrifice, how sincerely you care, how much in the service of your sons you are willing to put in. No amount of diplomatic nicety and verbal courtesy can alter this fact, and the future of the United Nations is bound up in it.

The United Nations is a place where the nations of the world may take whatever collective action they are at any given moment capable of taking. Such a place is a vital necessity.

While the need for the United Nations is as strong and as steady as the human yearning for peace, its future success depends entirely on the extent to which its members support it. It is up to them. They can drop it impatiently and destroy it because it has not brought the millennium or they can kill it by failure to support it. Or, like the Wright Brothers with their first airplane in 1903, they can perfect it and transform it into something which will make future generations forever grateful that we in the 1950's had the patience and the foresight to make this beginning.

For Americans the United Nations is not only a place to promote peace, it is the greatest single place in which to develop partners who, valuing their own freedom, will fight to defend it whenever it is attacked and thus, on a basis of mutual respect, help us in our struggle to survive. For a nation like the United States, which has most of the world's wealth and only 6 percent of the world's population, the conclusion must be obvious that we cannot have too many partners to help us carry the load of combat.

The United Nations is primitive; it is evolutionary; it has not brought, and will not bring, the millennium. But it is useful; its cost is small; it is an intelligent first step; it stands between us and international anarchy. It thus stands between us and World War III or the extinction of human freedom—or both. Finally, it represents another important step in man's long march toward freedom—a march with so many impressive associations with this historic city and this historic House of Burgesses.

UNITED NATIONS CHARTER REVIEW

(Excerpts from an address by Secretary of State John Foster Dulles before the Subcommittee of the Senate Foreign Relations Committee on the United Nations Charter, Washington, D. C., January 18, 1954.)

The United Nations Charter represents man's most determined and promising effort to save humanity from the scourge of war and to establish justice between the nations. In negotiating the Charter terms, the United States was represented by a distinguished bi-partisan delegation, largely drawn from the Congress, and the Charter was ratified by the Senate by almost unanimous vote.

The United Nations, thus launched, carried the ardent hopes of the American people, and indeed the peoples of all the world. The responsible leaders of our nation, without regard to party, have repeatedly said that the Charter represents the cornerstone of U. S. foreign policy.

It must in all frankness be recognized that the high hopes born of the San Francisco Conference of 1945 have not been fully realized. This is due to two principal causes.

In the first place, many initial hopes were exaggerated. War is not abolished, and a system of justice inaugurated, merely by strokes of the pen. If that were the case, we would have had international peace and justice long ago. Just and durable peace requires sustained and well directed efforts comparable in dedication to the efforts needed to win victory in war.

However, the written word continues to exert a peculiar fascination and there is a recurrent tendency to treat as done that which, according to a treaty, ought to be done. Hopes which had only this basis were doomed to be disappointed.

In the second place, many provisions of the Charter depended on cooperation by the so-called "great powers" and in fact the members of the Soviet Communist bloc have pursued policies which departed from the spirit, and indeed the language, of the Charter.

Nevertheless, the United Nations has a record of conspicuous accomplishment. Among major political results which flowed from its processes may be mentioned:

The withdrawal of Soviet forces from Iran;

The support of Greece while under Communist attack;

The conclusion of a permanent armistice between Israel and the Arab States;

The establishment of the Republic of Korea;

The disposition of the Italian colonies in Africa and the creation of the State of Libya;

The establishment of the Republic of Indonesia.

The organization of effective resistance to the armed aggression in Korea.

While the United States bore most of the United Nations burden in Korea, it should not be forgotten that 15 other members contributed armed forces and 46 nations made some form of contribution, either military or economic.

Thus, the United Nations became the first international organization to organize effective collective resistance to armed aggression.

The United Nations has helped to transform colonialism into self-government. The role played by the United Nations in this matter has been controversial and it is in some respects subject to legitimate criticism. Undoubtedly, however, it has exerted a useful influence in promoting peaceful rather than violent developments.

In addition to political achievements, the United Nations has provided means for economic and social developments which have benefited a large part of the human race.

In addition to its specific accomplishments, the General Assembly has served as a world forum for the presentation of different points of view. It has become a place where world opinion can register and exert a moral authority, which no nation, however powerful or despotic, publicly disdains or wholly disregards.

The greatest weakness of the United Nations—and this was foreseen at San Francisco—is the Security Council's inability to discharge its "primary responsibility for the maintenance of international peace and security." (Art. 24). It has not proved practicable for the Security Council to organize the armed forces, assistance and facilities which it was contemplated should be put at the disposal of the Security Council (Art. 43) for the purpose of maintaining international peace and security.

The Council's inability to function as designed has been primarily due to the abuse by the Soviet Union of its so-called veto power.

This same veto power has been abused by the Soviet Union to exclude from membership in the United Nations many countries fully qualified for membership under the terms of Article 4, which provides that the United Nations membership is open to all peace-loving states which accept the obligations contained in the present Charter and are able and willing to carry out these obligations.

Nations excluded by the Soviet veto are:

Austria, Cambodia, Ceylon, Finland, Eire, Italy, Japan, Jordan, Republic of Korea, Laos, Libya, Nepal, Portugal, Vietnam.

II

We are now approaching a time when in all probability there will be a review of the Charter with a view to its possible amendment. Article 109 (3) of the Charter provides that a proposal to call such a conference shall be placed on the agenda of the tenth annual session of the General Assembly, i.e., that of 1955, and present indications are that a review conference will be held.

The United States has already indicated that it expects to favor the holding of a review conference.

The Executive welcomes this coordinate action of the Senate in studying the problems which will confront such a conference.

The Executive approaches this conference with an awareness of the desirability of perfecting the Charter, but also with a determination not to lose the good that is, in the search for something better.

We have not yet taken any firm position with respect to Charter

amendments. We defer that until we have further advanced our own studies, and ascertained the views of our citizenry and Congress and of other nations.

In this connection we do not forget that Charter amendments require Senate consent.

Under the circumstances, I shall limit myself to indicating some of the major questions which might be brought before the Charter Review Conference, and as to which there should be an educated public opinion.

III

1. Universality

It is useful that there be an organization which is, generally speaking, universal and whose processes run throughout the world. Otherwise the association takes on the character of an alliance. Of course, universality inevitably means bringing together nations whose governments may strongly disagree. This has disadvantages. But such an organization maintains contacts between potential enemies, affords opportunities to dispel unnecessary misunderstandings, and, as President Eisenhower said in his State of the Union Message on January 7, 1954, it provides "the only real world forum where we have the opportunity for international presentation and rebuttal." This process tends, though slowly, to bring about conformity to a common standard.

It is, of course, unlikely that there will be universality in the complete and literal sense of that word. Unfortunately, there are governments or rulers who do not respect the elemental decencies of international conduct, so that they can properly be brought into the organized family of nations. That is illustrated by the regime which now rules the China mainland.

Even approximate universality does, of course, carry certain disadvantages. There are bound to be differences of opinion which limit effectiveness of action.

Doubtless, at the Charter Review Conference, consideration will be given to these problems of universality or limited membership. It will perhaps be considered whether Article 4, to which I referred above, expresses the desirable standards for membership.

In this connection, it should be recalled that Articles 5 and 6 permit of suspension and expulsion, although this requires Security Council action, which in turn is subject to veto.

It seems at the present time that most of the members of the United Nations feel that it is better to have even discordant members in the organization rather than to attempt to confine membership to those who hold the same views.

In this connection, it is to be borne in mind that few nations for long share the same views about every matter. Where they do share the same security views, or have regional community, they can organize themselves under Article 51 (collective security) or under the provisions of Articles 52-54 (regional arrangements).

2. Security

By the Charter (Article 24) the Security Council is supposed to exercise "primary responsibility for the maintenance of international peace and security." Can Charter changes better enable it to discharge that responsibility? Or must that primary responsibility be left to security organizations, the formation of which is authorized by Article 51? Or should greater responsibility be given to the General Assembly, where there is no veto?

In this connection I should note the "Uniting for Peace Resolution" of 1950 which puts the General Assembly in a position to play a decisive role with reference to peace and security in the event that the Security Council is paralyzed by a veto.

3. Security Council

Are the present provisions for membership and voting in the Security Council conducive to its maximum effectiveness? Should the veto power be taken away in respect of questions involving Pacific Settlement of Disputes(Chapter VI) and in respect of the Admission of New Members, as recommended by S. R. 239 (80th)—the so-called Vandenberg Resolution? Presumably, the United States would itself hesitate to go much further than this in now surrendering its "veto power."

4. General Assembly Voting

In the General Assembly, each nation has one vote—is this the best arrangement? If the General Assembly is to assume greater responsibilities, then should there not be some form of weighted voting, so that nations which are themselves unable to assume serious military or financial responsibilities cannot put those responsibilities on other nations? Should there be, in some matters, a combination vote whereby affirmative action requires both a majority of all the members, on the basis of sovereign equality, and also a majority vote on a weighted basis, which takes into account population, resources, etc.?

5. Armament

Since the Charter was adopted there has been a vast development of possibilities of mass destruction, particularly in terms of atomic energy and nuclear weapons.

As one who was at San Francisco in the spring of 1945, I can say with confidence that had the delegates at San Francisco known we were entering the age of atomic warfare, they would have seen to it that the Charter dealt more positively with the problems thus raised. Perhaps consideration should now be given to the creation of a special organ of the United Nations comparable to the Economic and Social Council and the Trusteeship Council to deal permanently with the problem of armament which carries so hideous a threat to the hopes of the peoples expressed in the Preamble to the Charter.

In this connection, I emphasize the President's epoch-making pro-

posal of December 8, 1953 to the United Nations suggesting the creation of an International Atomic Energy Agency to receive contributions of normal uranium and fissionable materials and to devise methods whereby this available material would be allocated to serve the peaceful pursuits of mankind.

6. International Law

In view of the importance of Law as an accepted standard of international conduct, are the Charter provisions adequate (Article 13 [1] [a])? These call on the General Assembly to initiate studies and make recommendations for the purpose of encouraging the progress and development of international law and its codification. However, so far little progress has been made. This is a great handicap to world order, because it means that decisions and recommendations of the United Nations are apt to be governed by considerations of political expediency rather than by accepted international law.

Simultaneous progress on a global scale is presently impeded by a sharp cleavage with reference to the nature of law. Most of the governments of the world regard "law" as man's effort to apply moral principles to human affairs. There is thus an objective standard of justice which can be appealed to. However, one third of the world's population is ruled by those who do not recognize any moral law and look upon human "law" as a means whereby those in power achieve their objectives and destroy their enemies.

7. The foregoing are the more important Charter amendment issues which particularly concern the United States. There are doubtless other aspects which are of great concern to other countries. However, I refrain from making any statement about those matters at this time.

Conclusion

It is in my opinion important that the United States should approach this problem of Charter review with recognition that the Charter as it is can be made to serve well the cause of international peace and justice. The defects in the Charter can to a considerable extent be corrected by practices which are permissible under the Charter. Aready it is accepted practice that if a permanent member of the Security Council abstains from voting, that does not constitute a veto despite the fact that Article 27 (3) provides for the "affirmative vote of seven members, including the concurring votes of the permanent members."

I have already referred to the "Uniting for Peace Resolution" which gave the Assembly a veto-less authority in security matters.

It is also necessary to bear in mind that much can be done within the *framework* of the Charter, but without actual dependence upon the procedures of the United Nations itself. I have referred to Article 51 which recognizes the right of collective self-defense. This has been extensively used. Many nations having similar security interests have banded together through security pacts. There are the Rio Pact, the North Atlantic Treaty, and comparable security arrangements between the United States and

other countries in the Western Pacific. The Soviets have also built their own security system with a series of so-called treaties with their satellites.

Such arrangements operate free of Security Council veto, although self-defense measures are required to be reported to the Security Council.

I have stated some of the problems which will probably be raised in a 1956 Review Conference, without attempting to give categorical answers. That would, I think, be premature for me. Let me repeat, however, that while a Charter Review Conference should be welcomed as a means of strengthening the United Nations, difference of opinion about how to do this should not then be pressed to a point such that the Review Conference would result in undermining the United Nations or disrupting it. The United Nations as it is, is better than no United Nations at all.

It must be borne in mind that, under the present Charter, each of the permanent members of the Security Council has a 'veto" on amendments which the General Review Conference may propose. The existence of this veto does not mean that the Review Conference is a futility. At San Francisco each of the nations which had joined to draft the Dumbarton Oaks Proposals had a "veto" over changes from these proposals. Nevertheless, they did not exercise that veto as against changes which were clearly reasonable and demanded by world opinion. We can hope that the same conditions will prevail at the prospective Review Conference. We can reasonably make our plans on the working hypothesis that no one nation will, in fact, be able arbitrarily to impose changes or to veto changes.

Let me end by reasserting my continuing faith in the United Nations. I fully share the view expressed by the Senate in its Resolution of June 11, 1948 that it is "the policy of the United States to achieve international peace and security through the United Nations." As President Eisenhower said to the Congress on January 7, 1954, "The United Nations deserves our continued firm support."

I believe that it lies within our power to advance the great objective of the United Nations provided we are patient, resourceful and resolute, and inspired by faith that man has the capacity to overcome evil with good.

50 FACTS ABOUT THE UNITED NATIONS

(Excerpts from a pamphlet published with the notation "May 1953 Revision" by the Research Section of the Department of Public Information of the United Nations.)

1. The United Nations has (May 1953) 60 member countries.

2. It was set up by the United Nations Charter, which was written at the United Nations Conference on International Organization, held at San Francisco from 25 April to 26 June, 1945.

3. It came into being on 24 October 1945, when China, France, the USSR, the United Kingdom and the United States and a majority of the other countries which signed the Charter at San Francisco, had sent formal notes to the U. S. State Department in Washingon, confirming their signature. 24 October is now United Nations Day.

4. Each member contributes to the annual budget of the United Nations. The amount is decided by the General Assembly and depends on each country's ability to pay.

5. When states join the United Nations, they promise—among other things—to solve their disputes by peaceful means.

6. All peace-loving states who agree to carry out the obligations of the Charter of the United Nations may become members of the United Nations.

7. The General Assembly admits new member countries—after they have been recommended by the Security Council. Nine new members have (May 1953) been admitted to the United Nations since it came into being.

8. There are six main bodies which form part of the United Nations: these are called the General Assembly, the Security Council, the Economic and Social Council, the Trusteeship Council, the International Court of Justice and the Secretariat.

General Assembly

9. The General Assembly meets once a year. It can also hold a special session if a majority of its members, or the Security Council, want one.

10. The Assembly decides important matters by a two-thirds majority vote; other questions by a simple majority. Every vote in the Assembly is equal to every other vote, and there is no "veto."

11. The General Assembly may discuss and make recommendations on all matters that come under the Charter, except that it cannot make recommendations on any question concerning peace and security being considered by the Security Council, unless the Security Council asks it to do so.

12. If the Security Council fails because of the veto, to act on a threat to the peace, the General Assembly can make recommendations to member countries for collective action to maintain or restore peace.

Security Council

13. The Security Council consists of eleven member countries. Five of these are permanent and are named in the Charter; they are China, France, USSR, United Kingdom and United States. Six of them are chosen by the General Assembly for two years, after which they may not serve again immediately.

14. The Security Council cannot take any decision, except on question of procedure, if one of these five permanent members is against it; this is called the "veto," or the unanimity rule.

15. The Security Council's job is to keep the peace; it acts on behalf of all the members of the United Nations.

16. When the Council is recommending measures for settling peacefully a dispute, a Council member if it is a party to this dispute may not vote.

17. The Security Council is in continuous session.

Economic and Social Council

18. The Economic and Social Council has eighteen members which are chosen by the General Assembly for three years; six of the members retire each year; they may be chosen again and often are.

19. There is no "veto" in the Economic and Social Council; all decisions are taken by a simple majority.

20. The Economic and Social Council helps the General Assembly in its work to improve living conditions and to extend observance of basic human rights.

21. Working with the United Nations are ten separate organizations called specialized agencies. They are: the International Labour Organization (ILO), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the International Civil Aviation Organization (ICAO), the International Bank for Reconstruction and Development, the International Monetary Fund, the World Health Organization (WHO), the Universal Postal Union (UPU), the International Telecommunication Union (ITU), and the World Meteorological Organization (WMO). Two further agencies, the Inter-Governmental Maritime Consultative Organization (IMCO) and the International Trade Organization (ITO) are planned.

22. A Technical Assistance Board co-ordinates the activities of the United Nations and those specialized agencies taking part in the combined program to give technical assistance to aid under-developed countries in their economic and social development. In addition to the United Nations, ILO, FAO, UNESCO, ICAO and WHO are "participating organizations" in the Expanded Program of Technical Assistance. They share in the special fund voluntarily contributed for this purpose by over 60 countries. Also taking part and co-operating in the program are ITU, WMO, the Bank and the Fund. The latter two agencies, however, do not draw from the Special Account.

23. The Council has Commissions that deal with particular parts of its work. Three of them are regional economic Commissions which are concerned with special problems in particular areas—Europe, Asia and the Far East, Latin America; the others deal with particular subjects, such as Human Rights or Transport and Communications. They give expert advice to the Council.

Trusteeship Council

24. Another body is the Trusteeship Council which assists the General Assembly in looking after Trust Territories.

25. The Trusteeship Council is made up of member countries that are administering Trust Territories, permanent members of the Security Council and enough other members elected by the General Assembly for three years so that the number of administering and non-administering members is equal.

26. Trust Territories are territories which have been placed under the International Trusteeship System. They do not govern themselves; the countries which govern them have placed them under the Trusteeship System by individual agreements approved by the General Assembly.

27. The idea of the Trusteeship System is to look after the welfare of the peoples of the territories and to help them to develop so that they may govern themselves.

28. At present (May 1953), there are eleven Trust Territories; they are: Ruanda-Urundi (Belgium), Cameroons (France), Togoland (France), Cameroons (United Kingdom), Togoland (United Kingdom), Tanganyika (United Kingdom), Nauru (Australia), New Guinea (Australia), Western Samoa (New Zealand), Marshalls, Marianas and Carolines (United States), and Somaliland (Italy). (The names of the countries which administer these territories are given in brackets.)

29. The Charter allows members to call a particular Trust Territory which it thinks is important for reasons of defense, a "strategic area." It is then supervised by the Security Council and not by the General Assembly. The member governing it may close off parts of the Territory for strategic reasons.

30. One of the Trust Territories defined as a "strategic area" is the Marshalls, Marianas and Carolines.

31. The countries which administer Trust Territories must send annual reports to the United Nations; the United Nations also sends out visiting missions to see for itself the conditions in the Territories.

32. People may send petitions to the Trusteeship Council concerning conditions in the Trust Territories; the Council has dealt with many such petitions.

33. Members which administer Territories which do not fully govern themselves and which have not been placed under the Trusteeship System send information every year to the Secretary-General concerning the economic, social and educational conditions in these Territories. This information is summarized and analyzed by the Secretariat, and these summaries and analyses are considered by a special committee set up by the General Assembly. These Territories are not looked after by the Trusteeship Council.

The International Court of Justice

34. The International Court of Justice is composed of fifteen judges and meets at The Hague in Holland. The judges are elected by the Security Council and the General Assembly, voting separately but at the same time.

35. The job of the Court is to consider all cases referred to it. Only states may be parties in such cases. It also gives advisory opinions when asked to do so by the General Assembly, the Security Council or other authorized bodies of the United Nations or specialized agencies.

Secretariat

36. The Secretariat takes care of all the administrative matters of the United Nations. It does the office work of the organization.

37. It works all year round, serving all parts of the organization and carrying out the programmes and policies laid down by them.

38. The members of the Secretariat are from many different

nations; they do not represent their countries but form an "independent" international civil service under the Secretary-General.

39. At the head of the Secretariat is the Secretary-General, who is appointed by the General Assembly on the recommendation of the Security Council. Under the Charter he has some political as well as administrative responsibilities. Trygve Lie, of Norway, was the first Secretary-General of the United Nations; Dag Hammarskjold, of Sweden, is the present Secretary-General.

A Few of the U.N.'s Activities

40. The United Nations sends investigation bodies to study on-the-spot situations in troubled areas, so that it may have first-hand information when recommending the steps to be taken.

41. The United Nations itself takes measures to end disputes; for example by appointing a group or a person to help the opposing sides to agree (as in the cases of Palestine, Indonesia and Kashmir).

42. If international peace is threatened or broken, or some country has committed an act of aggression, the United Nations takes collective measures to maintain or restore peace. Seventeen countries including the United States and the Republic of Korea (South Korea) are now (May 1953) taking part in such collective military action in Korea under a United Nations Commander in Chief appointed by the United States, and five countries are providing medical units. Forty-two member countries and four non-member countries are providing economic assistance.

43. The United Nations tries to secure agreement for regulating and reducing armaments and armed forces. A Disarmament Commission under the Security Council is working out plans for this as well as for eliminating weapons of mass destruction and for the disclosure and verification of information on existing armaments and armed forces.

44. The United Nations through its Technical Assistance Administration gives countries which ask for it expert technical advice in the fields of economic development, public administration and social welfare. Fellowships, pilot projects, regional training and demonstration centres and seminars are also offered to train nationals of the requesting countries in these fields. By the end of 1952—approximately 1,924 fellowship and scholarship holders had gone abroad from 86 countries for training in 36 host countries, and 751 experts of 48 different nationalities had been sent to 45 countries.

45. During 1952 the United Nations and the specialized agencies under the Expanded Program sent some 1,700 experts, recruited from 64 countries, to 65 countries, bringing the total since the inception of the program to well over 2,000. In 1952, 2,127 fellowships were given to nationals of 92 countries and they were working and observing in 45 countries. The number of fellowships awarded since the beginning of the program totalled some 3,000.

46. The United Nations works to further the observance of basic human rights; it has proclaimed a Universal Declaration of Human Rights as a common standard for all peoples and all nations.

47. The United Nations gives aid and protection to refugees through the Office of its High Commissioner. To help Palestine refugees in the Near East it has established a special fund, and a special agency—the United Nations Relief and Works Agency for Palestine Refugees in the Near East.

48. The United Nations works to improve the status of women. Its Commission on the Status of Women makes recommendations for granting women political and legal equality, equal educational opportunities and equal pay for equal work. A convention to grant women equal political rights with men was drawn up and opened for signature in 1952.

49. The United Nations runs a world-wide system of control over dangerous drugs, such as opium and cocaine.

50. Through UNICEF (the United Nations International Children's Emergency Fund), the United Nations supplies supplementary food, clothing and medical supplies to needy children in Europe, Asia, Latin America and Africa. During the first six years of its operation it has aided children in 84 countries and territories and as of March 1953 was shipping supplies for programs in 69 countries and territories.

UNITED NATIONS ONLY COMING OF AGE BUT CONFIDENCE ALREADY 'VOTED'

(Excerpts from an address by Secretary-General of the United Nations Dag Hammarskjold at Minneapolis, Minn., May 17, 1954, as carried in the United Nations Bulletin, volume 16, pages 414-415, June 1, 1954.)

The United Nations was created after years of fighting as an expression of a universal longing for peace, and based on a seemingly mutual will toward genuine cooperation between all five Great Powers. It was only too natural at such a time to leave aside cold analysis and look upon the new organization with the highest hopes and expectations as the guarantor of lasting peace. It is easy to understand why there was this tendency to overrate the powers of the United Nations and to overlook the fact that the organization was never more than an instrument whose usefulness to the member governments depended on the degree of unity and sincerity of their peace efforts, upon their will to avail themselves of this instrument and upon the efforts of the parties concerned to develop the organization into a more effective weapon for the defense of peace.

We all know that the hopeful mood of the immediate post war period was dispelled all too soon by the disharmony between East and West. The longing for peace remained as strong as before, but it was turned to an increasing degree in the classical direction that as long ago as the Roman Age was expressed in the well-known phrase that he who wants peace must arm for war. It was necessary that the United Nations be reappraised and its possibilities to work and to assert its influence in a seriously divided, yet physically interdependent world be put to the test. Before considering how this test is being met at present, I should like to suggest that—given the deplorable but inescapable fact of the "cold war"—this period of reappraisal has been beneficial in at least one important respect.

Misconceptions Dissipated

I am thinking of the usefulness of the thorough examination and down-to-earth discussion that during this time has centered around the United Nations. Ranging between destructive criticism and constructive imagination, this public airing of the issues has served to dissipate a number of harmful misconceptions and to explain the real nature of the United Nations in terms of its Charter and in relation to the world situation. From all of this a more realistic picture is emerging that will help the public, on whose understanding and support the future of the United Nations ultimately depends, to a truer perspective when they evaluate the merits and shortcomings, as well as the limitations and potentialities, of the organization.

Those who advocate a constitutionally stronger organization with at least some of the attributes of sovereign governmental power are coming to understand that such a development can come about only as the result of a fundamental evolution in basic attitudes among peoples and governments that may be a long time off. Seen from the opposite angle, the fears that resolutions adopted by majority votes in the General Assembly may infringe on the national sovereignty are being dissipated as more and more people are coming to understand that these resolutions are not binding on the governments but have the character of recommendations to governments to cooperate in proposed policies and programs.

Thus there is growing recognition that the United Nations neither is, nor was meant to be, a separate and overriding authority over its member states, but is rather a great association of fully independent nations where all action—or inaction—is determined by the respective policies of the participating sovereign governments. The frequent display in the conference rooms of the United Nations of clashing ideologies and fundamental differences between some of the most powerful members of this association is in itself a demonstration of this fact. But we have also seen that the conflicts, and the lack of agreement, have failed to break up the association or even to cause any of the participants to suggest such a far reaching step. Nor is this, as might be maintained, a merely negative asset. It means that the member governments not only remain pledged to the code of conduct set out in the Charter, but also that they are willing to continue to expose their manner of complying with their solemn treaty commitments to the scrutiny and verdict of world opinion, acting as a kind of conscience capable of exerting considerable influence in this respect.

A Fateful Junction

Surely this shared preference to stay on the road mapped out by the United Nations Charter reflects at least this much agreement—that this is the safest route and that it is better to endure the congestion and the roadblocks than to make any departure from it. The bottomless pitfalls that await the nations on any other course are no longer in doubt. We have arrived at a junction where the signpost offers a choice between "Direction Ruin" and "Direction Survival." We know what "Direction Ruin" means in the age of the hydrogen bomb, and our means of trans-

portation to that ultimate destination are only too well perfected. The road marked "Direction Survival" is hazardous, it leads across unknown country, and our means of transport are still in a primitive stage of development. Yet the leaders of the two main concentrations of power in the world today, together with all the member governments of the United Nations, have not wavered in their continued adherence to and support of the United Nations as offering the best opportunity of reaching the goal desired by all.

It is important that we do not lose sight of this basic attitude under the impact of successive crises in various parts of the world and the often depressing influence of the international climate, for it clearly indicates that we have only begun to learn how to exploit the potentialities of the United Nations.

A few moments ago I recalled the unrealistic expectations of 1945 and their harmful results in terms of an equally unrealistic disappointment of public opinion. I think that there has been another and less generally recognized consequence of these earlier exaggerated hopes which still affects, from time to time, the policies and attitudes of governments. This is a tendency to think of the United Nations as an institution primarily useful for a very special and great purpose—collective security against aggression. This was, indeed, the main image in 1945, not only in the minds of the people but in the minds of the leaders of the governments. Collective security remains a primary purpose of the organization. But I am afraid that this image also has the effect of leading the governments too often to forget that the United Nations has a less dramatic, but more frequently useful, role to play in world affairs. This role is to serve as a complement to the normal diplomatic machinery of the governments, adding a much needed multi-lateral weapon to the arsenal of diplomacy.

Please do not misunderstand me. I am not suggesting that the governments should on every occasion use the multi-lateral diplomatic instrument of the United Nations. Of course not. Most of the time the normal processes of diplomacy are preferable—and adequate. Much less do I share the fears I have sometimes heard expressed by good friends of the United Nations concerning the supposed by-passing of the organization in such conferences as those in Berlin and Geneva, or by regional arrangements such as the North Atlantic Treaty Organization and the Organization of American States. On the contrary, I feel that any conference or any regional security arrangement that advances United Nations purposes is to be welcomed, whether it is inside or outside the formal institutional framework of the organization. In such cases, however, I *do* feel that it is important for the member governments to keep the United Nations in the picture, fully and officially informed of developments. That is to say, the governments should have in mind that sooner or later the United Nations might—and, in some cases, probably will—be needed as a multi-lateral diplomatic instrument for the preservation of peace.

Holding the Balance

The work of peace is a day-to-day affair, based on continuing negotiations with all the parties concerned. It is of necessity a slow, undramatic

process, requiring not only skill and devotion, but above all patience and perseverance. The constructive, peace-building activities which make up the main work of the United Nations and often yield important results in terms of paving the way to a more stable peace, tend by their very nature to become obscured by the more dramatic news of the day. In Palestine we hear more about the skirmishes between Jews and Arabs than of what the United Nations armistice regime has done to prevent destruction and disaster for the whole area over the past five years. When the truce is working well in Kashmir, we hear nothing about it, but when there is an incident it gets on page one. This also can be said of the multi-lateral diplomacy at United Nations Headquarters. When it is most successful, the public usually hears least about it. Yet this day-by-day work is often essential for the purpose of holding the precarious balance that prevents dangerous situations from developing into grave and open conflicts.

A similar point applies to the work of the United Nations in the economic and social fields. The fundamental relationship of this work to the peace-preserving functions of the United Nations is too often overlooked. It is not for nothing that the Articles of the Charter concerning international economic and social cooperation begin with the words: "With a view to the creation of conditions of stability and well-being which are necessary for peaceful and friendly relations among nations . . ."

What is known as technical assistance to the under-developed areas of the world—that is to say to those vast areas in Asia and Africa where poverty is still a law of life for 1,500 million people—is no mere question of charity—or of good works. To assist in improving the living conditions of the peoples in these areas by material help and know-how is a major task of our civilization. It is a responsibility for which the United Nations is particularly well suited by its international character. In the United Nations the developed countries of the West and the countries which are emerging from a colonial or semi-colonial dependence, are equal members. Thus, technical assistance undertaken through the United Nations cannot possibly be construed as foreign or external influence and becomes instead a partnership of resources for mutual benefit.

A Faith Confirmed

From a long range point of view, such programs to raise living standards and purchasing power are as important for their role in creating a climate more favorable to peace as they are to economic development and social progress. Taking into account the lesson of the long experience of history—that economic weakness and social injustice tend to generate grave political consequences—the United Nations cannot limit its peace-making task to the political field but must aim through such programs toward reducing the risks of dangerous political conflicts. It is in this perspective that the United Nations program of technical assistance should be regarded.

The United Nations is only beginning now to come of age. It is far too early to reach any final judgment as to the degree of its success or

failure. We do know this much. In spite of all shortcomings and frustrating experiences, the member governments look upon the United Nations today as a vitally important instrument for peace. We know also that the substantial majority of the people in this country—and in other countries—concur in this opinion on the basis of sober evaluation. Thus, for governments and peoples alike, the United Nations remains the principal source of hope that a world without fear may, in time, be attainable. This I consider to be a vote of confidence in the United Nations that reflects a refusal to allow disappointments over the lack of spectacular results to cause despair and a recognition that the seemingly modest achievements so far attained are of sufficient significance to confirm a reasonable faith in the prospects of ultimate success.

THE WORK OF THE UNITED NATIONS

(Excerpts from an address by Ambassador James J. Wadsworth, Deputy U. S. Representative to the United Nations, in United Nations Briefing for National Education Association, United Nations Headquarters, June 28, 1954.)

Let's look first at the United Nations organization which requires, in order to succeed in its urgent task, the understanding support of the people of this country and of the people of the world.

Let me admit at the outset that the United Nations has not been able to live up to the expectations which many people had when it was launched in 1945. Certainly these expectations were far above what could reasonably be expected of any human institution in the relatively short span of eight years. Certainly some of the suppositions underlying the United Nations, such as the expectation that the great powers would act in concert to preserve the peace, have proved ill-founded. But I suggest that this is much less the fault of the instrument than of the states who assumed solemn responsibilities for making the instrument work effectively. I cannot conceive of any changes in the language of the Charter, for example, which would have prevented the Soviet Union from using its power to promote its foreign policy goals of weakening the democratic world and seeking to extend its dominion—that decision was made in the Kremlin and not in the halls of the United Nations.

This is part of the difficult context in which the United Nations has been forced to work. It has been obliged to carry the responsibilities of keeping world peace while its capacity to do this job has been badly limited by the defection of a powerful element of the police force which was supposed to have been at its disposal.

Nevertheless, the United Nations, even within these limits, is an essential institution. It was born of, and is, sheer necessity. It is the latest step in the evolution of international organizations which began about a century ago. These organizations developed, not because foreign offices were filled with stargazers, but because they were filled with hardheaded realists who found that it was practically advantageous for nations to work together on such common problems as the control of epidemics, improvement of postal services, etc. The European states, for example, began to collaborate on health and quarantine measures in the mid-19th century because the spread of plagues and epidemics was

a common danger to them all—because germs simply would not respect national frontiers. As the world grew smaller, the demonstrable need for regular channels of international action spawned more international agencies. And each of these developed because it made more sense for nations to work through international institutions than to work separately on common problems.

If anyone doubts the practical value of the United Nations, let him answer these questions. What plagues or epidemics which the United Nations has prevented would he let spread unchecked? Would he, for example, have preferred no United Nations action on the serious cholera epidemic in Egypt in 1947—when previous such epidemics had many times swept out of the Middle East to envelop Europe in black deaths which killed far more people than wars? Which of the hungry, homeless and illiterate millions would the cynic see abandoned to despair and to communism? Which of our allies in the United Nations would he prefer to do without?

Would we prefer to do without the two divisions supplied by sixteen members of the United Nations who fought so gallantly beside our own divisions under the United Nations flag in Korea against lawless Communist aggression?

The hard fact is that if we didn't have the United Nations, the American people would be demanding that we create it—right now.

The objectives of the United Nations and of United States foreign policy are virtually identical. We are both striving for a peaceful, secure, free and prosperous world. Now, this is not an accident—for we took the lead in establishing the United Nations, and our own ideas and ideals were written into its Charter.

Not only are the objectives of the United Nations and of the United States the same, but the activities of the United Nations run along the same lines as our activities. Whatever our temporary frustrations, we should not overlook the fact that we have consistently received an overwhelming support of the non-Soviet bloc members of the United Nations on thousands of ballots over the past seven years—on an average of 45 to 50 votes against 5 of the Soviet bloc. Now, I could understand misgivings about whether the United Nations is good for the United States if we were in the minority or if there were some sort of even split between support of our policies and of Soviet policies. But the fact is that our own policies on major issues have been considerably strengthened in impact as a result of strong support from other United Nations members.

The United Nations does work effectively. Many of its programs produce results which could not be otherwise obtained; some of them produce greater results at less cost than even we ourselves could bring about. In technical assistance, for example, the United Nations is in a position to tap the skills of the whole world instead of just one country. Even though we have tremendous know-how here in America, we'd be hard-pressed to provide many Arctic fisheries experts or coffee growing specialists. Our technical assistance dollars go farther in the United Nations program because they are matched by contributions from many other countries. And our aim channeled through the United

Nations is free of political connotations—it is not susceptible to resentment and fears of imperialism on the part of sensitive and suspicious countries abroad.

Should we kiss-off this type of help, and try to carry the whole load ourselves? Should we pay heavier taxes so that we can run our own show without bothering with foreign currencies? Should we take more of our experts from our own factories, mines and farms instead of using the skills of other nations?

The hard fact is that if we didn't have the United Nations, the American people would be demanding much the same sort of means for mobilizing foreign skills and monies to help other people to help themselves toward great economic and political stability.

Now I come to one of the difficult parts of all speeches about the United Nations. That is the "Yes, but" part. The United Nations has suffered from over-glorification of its first years. Hopes were too high after San Francisco. The United Nations Charter was and is a magnificent human achievement. It marks a watershed in the history of man's passage from the rule of force to the rule of persuasion. But it could never satisfy and should never have been expected to satisfy, in and of itself, the craving for peace which followed the terrible years of World War II.

People who indulge in excessive optimism are always the first to succumb to hopeless cynicism. The most loyal supporters of the United Nations today are those who were a little more skeptical in the first place. They can accept the fact that the United Nations is not perfect and still appreciate and work to extend its effectiveness.

It is a mistake to think the United Nations can't do anything just because it can't do everything. It is equally a mistake to think that faith in the power of the United Nations requires us to drop every problem into its organizational lap.

The United Nations was never designed as a catch-all for all of the world's problems. The Charter sets up an organization to handle the problems which cannot be handled through existing organizations and existing governmental and inter-governmental machinery. It specifically recognizes the right of self-defense and the institution of regional arrangements.

NATO, for instance, is an organization which comes well within the scope of the Charter and is dedicated to the support of the Charter's purposes of peace and collective security. NATO is an important supplement to the United Nations and will remain so for as long as the Soviet Union refuses to cooperate in the peace-making and peace-keeping functions of the Charter assigned to the five great powers at San Francisco.

The existence of a regional organization such as the Organization of American States with a close knowledge of its own regional problems in no way detracts from the value and importance of the United Nations. It should be used as much as possible in all problems affecting nations of this hemisphere.

It is moreover a misunderstanding of the function of the United Nations to expect it to manufacture solutions which can be dropped from

above on a pair or group of sovereign nations who feel that their interests are in conflict. Even if there were such a thing as absolute justice available to man's limited intellect, even if there were a perfectly just solution which could be worked out to problems such as those we see in Kashmir and in Palestine, they would only be effective in keeping the peace if the solutions were genuinely acceptable to the people concerned.

If the United Nations can avoid the organized violence of warfare as it has in Kashmir and Palestine and at the same time provide a situation in which the parties to the dispute can work out over a period of years a mutually satisfactory solution, it is worth all the faith and fortune that have been poured into it.

The problem of colonialism is another vexing problem in which the United Nations role can be neither decisive nor unimportant.

We in the United States, because of our history and national character, are inevitably committed to the ideal of self-determination for all people. We recognize however that this ideal, no more than any other, can be achieved by fiat. A free and self-sustaining nation is an organism which requires time to develop and grow strong. It is not a mechanical thing which can be constructed overnight.

Today's world is not a safe playground in which young governments can try their skills in peace and learn by trial and error. So long as international communism is constantly exploiting the natural passions of nationalism for its own imperialistic purposes, any error can be fatal and final.

In this situation, United Nations discussions of explosive political problems and the quieter United Nations machinery of trusteeship and reporting play a double role, each equally important. They are, at the same time, a spur to progress and a brake against violence. These activities of the United Nations offer to those who aspire to self-determination a safe and constructive alternative to rash action and dangerous impatience.

I have just outlined a series of situations in which there appears to be no simple yes or no answer. They are typical of many of the problems which confront us.

The final objectives of American foreign policy are clear. We want a peaceful, orderly world in which all men can work together in freedom against the twin tyrants of fear and want. But in day-to-day decisions—and the execution of foreign policy is always in terms of a series of day-to-day decisions—these decisions are never presented in such simple terms. Policy making would be easy if we had only to choose between good and bad, between black and white. Actually most of the practical choices are between shades of grey.

It is this situation which places a special burden on the educators of the world.

It is education alone which can develop the patience and perspective and the discrimination we need to follow the difficult narrow road which will lead us away from the tragedy of a third World War.

It is in the schools of our country that these essential virtues of understanding are being developed. They must become part of every

citizen's equipment if we, as a nation, are to act wisely and effectively against the difficulties and dangers of a divided world.

It is you who can help us to look at the United Nations with real perspective, and participate in it with patience and wisdom. I am fully convinced that the United Nations offers unique opportunities and real promise for helping us through the long haul to a far better world for ourselves and for our children. As a human institution operated by human beings, let us recognize its weaknesses, understand its inevitable limitations, but appreciate its value to everything we stand for.

THE UNITED STATES AND CHARTER REVIEW

(Excerpts from an address by David W. Wainhouse, Deputy Assistant Secretary of State for United Nations Affairs, at Minneapolis, Minn., April 10, 1954, as carried in The Department of State Bulletin, volume 30, pages 642-645, April 26, 1954.)

Charter review is essentially a political problem. When we talk about review of the Charter, inevitably we are talking about world politics and political relationship among sovereign states. The United Nations today is an association of states where decisions are implemented through voluntary action by these states. This fact places certain limitations on Charter review as we will see later.

We are aware that the difficulties encountered in the operation of the United Nations today are a product of political attitudes and actions of governments. We recognize that dynamic societies oftentimes place great strains on the legal documents which guide their actions. We know that we have to look at the practical relationships between the Charter and political reality. We know that our task is to determine whether changes in the Charter can foster desirable and feasible developments from the point of view of the national interest of the United States and the parallel interests of the free world.

This immediately raises the corollary question of how the United Nations has worked in the past 8 years. I should not want to give the impression that we believe the United Nations is a perfect instrument, or that it operates just as we want it to. Not at all. It has its full share of faults. We have had less than 9 years of experience with this new tool. That is a very short time in the history of political institutions. It is long enough to reveal shortcomings, but not long enough to correct them all. We know that U.N. action is cumbersome. It is generally slow. Being without coercive power, in the sense that a state has political power, spokesmen in the United Nations sometimes indulge in irresponsible talk or action. What is more serious is a tendency in the United Nations to push this fledgling organization too fast and too far. Member states which have recently gained their own independence, for example, are prone to demand complete and immediate independence for all other dependent territories, whether or not these territories are ready for it and whether or not they can support themselves or protect themselves.

Despite the imperfections I have just noted, the United Nations has adapted its practices to a fast-changing world. It is equally apparent that we have scarcely begun to realize the great potentialities of the

United Nations. One might say of the Charter, as Chief Justice Marshall said of the Constitution of the United States that "it was intended to endure for ages to come, and it is consequently to be adapted to the various crises of human affairs." The Charter is not rigid or static.

The broad and comprehensive strokes used by the framers of the Charter have permitted developments to take place not entirely envisaged at San Francisco. Let me give you two concrete examples of how this 8-year-old organization has demonstrated a high degree of constitutional adaptability.

The first relates to the veto. Article 27 (3) of the Charter provides that the Security Council shall make decisions on non procedural matters "by an affirmative vote of seven members including the concurring votes of the permanent members." On the face of the Charter this would mean that each great power must vote yes or a resolution will fail. Actually, the constitutional practice of abstention has developed so that a resolution supported by any seven members is not defeated unless a great power votes *no*. Moreover, the practice of abstention has been extended so that deliberate *absence* by a great power, such as the Soviet absence during the June 25 and 27 debates on Korea in the Security Council, will not prevent that organ from acting. Since this experience in 1950, the Soviet Union has not ventured to boycott the Security Council.

The most significant demonstration of United Nations flexibility in light of changing political conditions is the "Uniting for Peace" resolution which was adopted by the General Assembly in November 1950. This is the broad response of the United Nations to Soviet vetoes and obstructionism which have prevented the Security Council from exercising its primary responsibility of the maintenance of international peace and security. Now the General Assembly can meet in emergency session and recommend collective measures, including the use of force, to members in the event the Security Council is unable to act. The fact that one organ is paralyzed means that other United Nations organs have had to assume greater functions. The harm done by the abuse of the veto in the Security Council has led to the compensating activity of the General Assembly through the "Uniting for Peace" mechanism.

Limits of Charter Review

There are a number of theoretically possible extremes which we in State Department have already ruled out in our own approach to this problem. These extremes would include such things as trying to write a brand new charter. We feel this would open a Pandora's box, making it difficult, if not impossible, to reassemble anything like the present United Nations. As Secretary Dulles said, "The United Nations as it is, is better than no United Nations at all."

The map with which we are working, and on which we are trying to chart a reasonable course, also has on its extreme limits proposals to establish some sort of superstate; to expel those we do not like; and to withdraw United States participation.

So far as a "superstate" is concerned, I would remind you that we must work with the material at hand, with the world as it is. We live

in a world of sovereign nations and we are working mightily to develop a level of cooperation among them which would begin to make possible the fulfillment of the commitments embodied in the present Charter.

Obviously, a voluntary association of states is not adequate in itself to give us a binding guarantee that there will be no war. But the United Nations as a voluntary association does afford to all peace-loving states a reasonable assurance that they will have friends and allies if they are wantonly attacked by an aggressor. It also works in many ways to prevent wars before they can start. President Eisenhower has called it a "sheer necessity" and has said that it is "man's best organized hope to substitute the conference table for the battlefield." The Charter review conference must not hamper these vital aspects of United Nations activity. We do not believe that it could profitably devote itself to the attempt to create a superstate.

Without the Soviets, the United Nations' chance of serving as a channel for East-West negotiations, as in the ending of the Berlin blockade, would be gone. Of most serious concern is that if they were to be ousted from the United Nations, it is possible that the organization might break up.

Finally, in spite of our abhorrence of Soviet policies or the obvious shortcomings of the United Nations, we do not look to the Charter Review Conference as a vehicle for our own withdrawal. There is no country which has more to gain from the successful functioning of the United Nations than does the United States. The United Nations cannot do as we would wish it to do in every instance. If the United Nations is a mirror which often reflects disturbing realities of our world, the solution is not to smash the mirror. If the United Nations is also, as Ambassador Lodge suggests, a loudspeaker, we do not attack the loudspeaker, we use it. Our withdrawal would mean handing the Soviet Union a golden opportunity to organize a world community in its own image. In an interdependent world, in which the oceans no longer divide us from other countries and in which communications have become universalized, there can be no go it alone. The United States no longer has the choice of isolating itself from the rest of the world. We are a world power. Our interests are not and cannot be confined to any one area. They are worldwide. In concert with our free world allies, we must continue to pool our strength—military, political, economic, and moral—to the advantage of ourselves and the free world.

What We Hope to Achieve by Charter Review

As a minimum a review of the Charter and constitutional procedures and practices should bring greater understanding to our people and to the peoples of the world as to how essential the United Nations is to the peace, security, and well-being of Americans and the rest of the free world. It should bring about an understanding of the extent to which the potentialities of the Charter are being realized. It can help measurably to refurbish the faith we have in the present Charter without raising false hopes and expectations.

This is a minimum. Our greater objective is to strengthen the United

Nations in all its aspects on the premise that this will foster the national interests of the United States and the free world. Charter review can nurture the common consensus among the freedom-loving peoples and thereby make the United Nations more effective as an instrument of peace, security, and well-being, provided, of course, that any differences of opinion will not be pressed to the point where the solidarity of the free world is disrupted and the United Nations is torn asunder.

The United Nations is not a brooding omnipresence in the sky. It is not a self-operating mechanism which will automatically maintain and enforce peace. It is rather an instrument which can aid us to understand the strife, trouble, and human need which exist in the world today and provide us with the means to work in cooperation with other nations for the peaceful solution of common problems. It is an instrument which affords nations the opportunity to combine their moral and material strength in support of the great principles of the Charter. The effectiveness of the United Nations depends not only upon the lettered provisions of the Charter but upon the will and determination of the peoples of the world to make it work. To the extent that Charter review can help to develop this will and determination, it will have served the interests of the United States and of the free world.

THE ROLE OF THE UNITED STATES

(Excerpts from an address by Robert Murphy, Deputy Under Secretary of State, at Philadelphia, Pa., October 23, 1953, as carried in The Department of State Bulletin, volume 29, pages 619-623, November 9, 1953.)

Certainly the emergence of the United States as the leader of the free world has tremendous historical significance. How we handle the job will shape the future of generations to come, our own included.

We didn't ask for it. We didn't want it. Most of us have moments of nostalgia for the old days when our responsibilities stopped at the water's edge.

There is an old story of a Danish king who ordered the tides to recede. Naturally they didn't. We have found history equally uncooperative.

The truth is, we had no choice. Had we refused, there was another candidate, ready and far from reluctant. The Soviet Union would have been very glad to have accepted those responsibilities.

We are, however, trying to give the world something new in the way of leadership. Perhaps this too was inevitable. The 20th century has introduced a new concept into the pattern of international relations. That concept is cooperation. The leadership of the United States is based upon cooperation. We have sought allies rather than satellites.

The most decisive act of our leadership was the organization of the United Nations. Perhaps there could have been a United Nations back in 1945 without the United States. But I doubt it. The world, weary after the war, was certainly ready for the idea. But picking up the pieces after World War II was a staggering prospect to many battle-torn and bereft nations.

The great goal of the United Nations from the beginning was peace—"to save succeeding generations from the scourge of war." But it was more than that. It was to make peace meaningful. It was to give men everywhere a stake in that peace.

In the U.N. we hoped to develop partners in this tremendous undertaking. We hoped that the nations of the world, working together in mutual respect and tolerance, could move together toward the U.N. goals.

We had accepted the responsibilities of leadership. But we saw our new position in world affairs as an obligation rather than an opportunity. We saw that our interests lay in helping rather than exploiting.

That was eight years ago. Today the U.N., in its great glass tower on the East River in New York, is a going concern. It is a vital force everywhere in the world.

Having returned recently from Korea and Japan, I can testify to the practical manner of U.N. operations in a crucial area.

The course of events since 1945, however, has called for some drastic changes in the original U.N. concept. As Secretary of State Dulles recently said:

"The United Nations was built largely on the expectation that the leaders of the grand alliance, who had worked together for victory, would continue voluntarily to work together for peace. That expectation was ill-founded."

It was indeed.

The ink had hardly dried on the signatures to the Charter before it had become clear to the rest of us that the leaders of the Soviet bloc had a different concept of the U.N. Year by year that dismal fact has become increasingly clear.

That the U.N. has survived this betrayal—for it is nothing less than that—is, to me, a near-miracle. It is a tribute, as I see it, to the basic soundness of the structure. It is a tribute to the deep sincerity of the other U.N. member nations and, I like to think, to the leadership of the United States.

The U.N. took the shock of the aggression in Korea. The United Nations met that first major test with courage and determination.

We have to be realistic in evaluating the record of the United Nations in Korea. The test came when the flood tide of Communist imperialism had reached its peak. The aggressors were ready. Their plans had been carefully made. The rest of us were not.

That is, of course, always an advantage enjoyed by the outlaws in any community. They are not bound by ties that restrict honorable men.

But the U.N. met the challenge. That the United States was obliged to bear a disproportionate share of the burden is true. We did. But it is also true that 15 U.N. nations other than the United States did contribute armed forces and that a total of 46 nations made some form of contribution, whether military or economic. And it should be added that during the past months 75 per cent of the frontline in Korea was manned by non-United States forces.

Only time will reveal the ultimate bearing of the Korean experience on the prospects for world peace. It is a lesson, however, for other

would-be aggressors and one, I think, that will not be lost. From now on small independent countries can have a greater sense of security that they will not be battered down by international big bullies.

The U.N. learned much by the Korean action. It has already begun to improve its procedures. In the case of a future such attack, it is hoped that all the nations of the free world will want to make their resources available.

U.N. Has Nationwide and Nonpartisan Support

We built better than we knew back in 1945.

At the time the U.N. was organized, the American people were solidly back of the proposal. Support was nationwide and nonpartisan. When the Charter came up for ratification in the Senate, you will remember, the vote was 89 to 2.

That support, I am convinced, has not wavered. Recent opinion polls, in fact, indicate that it has even risen. The American people believe in the U.N.

There are, to be sure, critics. Some of these, though relatively small in number, are pretty intemperate and a good deal of the time get more attention with their loud noises than those who express mature and realistic support for the United Nations.

Support of the U.N., however, has, I think, undergone certain changes. I have only recently returned to the United States after some years on foreign assignments, and I detect the difference. I sense on the part of many people an increasingly analytical frame of mind where the U.N. is concerned.

America's support of the U.N. must be based on sound and realistic understanding of its capabilities and its limitations. It has not brought and cannot bring the millennium. But it is still mankind's brightest hope for peace. And peace could well be his only hope of survival.

THE UNITED NATIONS RECORD OF ACCOMPLISHMENT

(Excerpts from an address by Ambassador Henry Cabot Lodge, Jr., U. S. Representative to the United Nations, at New York City, April 19, 1954, as carried in The Department of State Bulletin, volume 30, pages 721-725, May 10, 1954.)

As a people, we Americans like to solve problems, to overcome obstacles, and to build. It is a national trait. We have been doing these things ever since the foundation of our country and they have become second nature with us. We do not perhaps reflect much on the fact that all problems cannot be solved and that all obstacles cannot be overcome.

We have developed an attitude which to some foreigners seems to be like that of the busy executive who wants to get everything cleaned up in time to catch the 5:15 train. To some of them, Americans are like people who think of the world as a potential tennis court in which all the tapes are stapled down and all the edges neat.

The direct opposite of this attitude exists in certain other parts of the world where many think that the great problems cannot be solved—that they can never be solved and that the best thing for sensible men to do

is to roll with the punch, duck your head when the missles start flying and generally follow the idea of "eat, drink and be merry for tomorrow we die."

As between these two attitudes, there is no doubt whatever that we are more nearly right and they are more nearly wrong. Of course, problems can be solved. They are being solved all the time in one way or another. In fact some of them are being solved in such a way that the solution creates a lot of new and more difficult problems. But one thing is certain: the world does not stand still.

Some problems in the past have been brutally solved by war—witness the overthrow of the central European monarchies in World War I, the destruction of Fascism, Nazism, and Japanese imperialism in World War II. To be sure, these events witnessed the rise of communism, which in its turn brought immense new problems. These are changes which show that the world does not stand still.

Another great change which all men of my age have seen is the growth of nationalism all over the world. It is one great world fact which in most cases has been accompanied by fighting, some of it on a small scale and some of it to a larger degree.

Many changes have also come about in the world through peaceful means. In fact, the whole face of the world was changed by the discovery of America which was made in rather primitive sailboats and has since been followed by steamships, railroads, automobiles and airplanes in the field of transportation, and by telegraphy, radio, motion pictures and television in the field of communications, by medical science, by mass production and by a whole range of other scientific developments.

These peaceful forces of science, commerce and individual effort really do cause far-reaching innovations. Unhappily it is not often that a far-reaching innovation is brought about in the world exclusively by political and diplomatic means and without fighting. The independence of India is one of those unusual cases. In the last few weeks an event of far-reaching proportions was brought about exclusively by political and diplomatic means. This was the decision of Pakistan to be counted with the free anti-Communist forces of the world, and the decision of President Eisenhower to extend military aid to Pakistan. This event and the recently signed agreement with Turkey, of which it is a part, can have a tremendously stabilizing effect in one of the most crucial parts of the world. It is a very real setback for Communist imperialism and should give courage to lovers of freedom in the Near and Middle East—and all over the world. These are examples of statesmanship with a capital S.

But is it not always possible to bring about such basic changes in international relationships by peaceful political and diplomatic means. We Americans make a mistake if we expect too much of the political and diplomatic tools which are available to us. We should not have a sense of failure because there is no peace treaty to conclude World War II in an orderly manner; or because there is no peace treaty establishing permanent relationships in Palestine; or because there is as yet no peace treaty for Korea. We should not be contemptuous of more modest solutions because we overestimate the possibility of curing all the world's ills in one fell swoop.

Talk or Fight

And we should not get impatient with proceedings of the United Nations or other international gatherings because they talk and do not reach basic solutions of some international questions. To many of these questions there is no basic solution under present conditions. In many of them, the choice is: "talk or fight." The fact that the talk may be boring or turgid or uninspiring should not cause us to forget the fact that it is preferable to war.

Now, the wars that don't happen are not dramatic. But there is real satisfaction in working in a place where you feel that sometimes you have helped prevent fighting and bloodshed even if it requires some verbal toe dancing and walking on eggs and what, to most of us, appears to be pettifogging. There are some circumstances in international affairs when the best thing to do is to stall for time and give people a chance to cool off. This often clears the way for diplomacy to exert a moderating and conciliatory influence.

The United Nations has become an accepted instrument of last resort. A state need not feel it has lost prestige by the reference of its problems to the United Nations. Indeed, a state would lose great prestige if it resisted the United Nations playing its conciliatory role.

UNDER SECRETARY SMITH AT COLUMBIA

(Excerpts from an address by Under Secretary of State Walter B. Smith at Columbia, S. C., October 20, 1953.)

It is the belief of this Administration that the welfare of the American people is best advanced in a community of nations at peace. American foreign policy has as its objective the building of a world peace—one that is equitable and enduring. Our allies in the community of free nations have similar aims.

Regrettably, since the end of World War II, we have been met at almost every turn by the expansionist policies of international communism. These policies, no matter how they were executed at any particular time or place, supported one single aim—the extension of the influence and control of the Soviet orbit.

The conflict between the peaceful aims of this country and its associates and the dynamic expansionism of the Soviet Union is a condition which we confront everywhere in the world. It is the source of most of the tensions that endanger world peace.

This phenomenon accents the complexity of the problems with which we must deal, but the fact is that even if the Soviet attitude were conciliatory and cooperative the peace we seek would not be easily won. The difficulties to be resolved would still be extensive even if communism were suddenly to vanish from the face of the earth.

Thus, we find ourselves dealing with problems which have no direct connection with the Soviet Union but which are nevertheless complicated by the character of Soviet policy. And, in addition, we must cope with situations which are exclusively the product of aggressive Communist policy.

These peculiar conditions have made demands on American leader-

ship which are without parallel in history. We are in a situation which I will call "non-war," for want of a better term, and during this unhappy period of history we must pursue a dual purpose. We are called upon simultaneously to prevent war and make peace.

In order to prevent war, we have been increasing our strength—our moral, our economic, and our military power. The latter element—increase in military power—may seem inconsistent with our peaceful purposes. Actually it is not. We have ourselves sought peace through weakness for a hundred years and this formula has failed.

We are aware that the Soviet leaders have a realistic respect for strength, and their behavior has demonstrated repeatedly that strength is an effective deterrent to aggressive adventures.

To create the necessary defensive strength, we have entered into a partnership with the other free nations who share our ideals. This is simply realistic. Obviously, no single nation can stand alone against the Communist orbit. Obviously, also, no coalition which does not include this country can muster power necessary to survive. On the other hand, an effective defensive coalition which includes the United States can demonstrate such strength as to place it beyond challenge.

But physical strength alone has negative overtones. So the factor of strength in our policy is joined with constructive action to develop a more viable pattern of international relations.

One focal point of the positive phase of U. S. policy is the United Nations. The fact that Governor Byrnes was asked to serve on our delegation indicates the importance we attach to the UN as a forum where statesmen from all nations can meet to resolve the difficulties which confront the world. In the UN, we have the machinery for negotiating differences and settling controversies by peaceful means. And beyond this, in the specialized agencies, a vast amount of constructive activity is afoot, designed to deal with current problems by eliminating the causes which generate them. I refer to the World Health Organization, the Food and Agriculture Organization, and others like them.

We all have heard criticism of these efforts. At one time, in my ignorance, I was inclined to criticize them myself. I know better now. I realize that they are an effective blend of idealism and practicality, part of a concerted effort to help the peoples of the world improve their lot— to give them something better to live for. Their purpose is to keep alive and foster that spiritual quality that disinguishes free men from the slaves of Communist totalitarianism.

And when one studies the strategy of communism it becomes apparent that only by positive action of this kind can we make headway.

PEACEFUL CHANGE THROUGH THE UNITED NATIONS

(Excerpts from an address by David McK. Key, Assistant Secretary of State for United Nations Affairs, at Washington, D. C., March 1, 1954, as carried in The Department of State Bulletin, volume 30, pages 394-397, March 15, 1954.)

Korea—the acid test—proved that had there not been provision for collective action against aggression, the Charter concept of peaceful change would have been meaningless. Therefore, following the Korean

aggression, the Uniting for Peace Resolution developed new procedures to deal in the future with threats to the peace where Security Council action was impossible because of the veto. These procedures enable the United Nations to prepare in advance for dealing with active and potential breaches of the peace, and to deal with them flexibly. Possibly a more important consequence of the Uniting for Peace Resolution is that it acts as a psychological deterrent to the potential aggressor, influencing it to accept procedures for peaceful change.

The United Nations as an instrument of peaceful change also encourages orderly progress toward self-government or independence and strives to develop higher living standards, and to broaden human rights.

The United Nations Charter provides the means to channel into a constructive pattern the drive for national independence whose pent-up emotions were released so violently in the immediate postwar period.

United Nations activity in the field of dependent peoples quite naturally often raises the question of whether the availablility of the United Nations as a forum does not actually encourage more extreme demands for immediate self-rule. This may sometimes be the case. More often, however—and this is our goal in all cases—the United Nations acts as a constructive influence upon nationalistic forces which might otherwise erupt in a violent manner.

INTERNATIONAL UNITY

(Excerpts from an address by Secretary of State John Foster Dulles at Seattle, Wash., June 10, 1954, as carried in The Department of State Bulletin, volume 30, pages 935-939, June 21, 1954.)

It is, however, not enough to rejoice in our difference. We must find ways whereby, despite differences, we can cooperate. In an era when science has almost obliterated distance, it is inevitable that men should create institutions for association. The most significant cooperative effort is the United Nations.

Personally I have a great attachment to the United Nations. I was a member of the United States delegation which drew up the Charter. I have attended six out of the eight sessions of the General Assembly.

I can assure you that President Eisenhower and his administration support wholeheartedly the United Nations. We intend to avail ourselves of its processes wherever they are relevant to the problems which engage us.

There are, I know, many who are discouraged about the United Nations because they feel it represents too much difference. Some would prefer to have the membership reduced so that the residual would represent greater conformity. I admit that the present differences, coupled with present voting procedures, impair the utility of the United Nations as an active body. But this could be remedied without constantly reducing membership as a means to gain efficiency.

It is important to have a world forum, where differences which actually exist in the world are made apparent and can be judged.

So long as nations are genuinely independent and have governments which do not violently flout the peaceful principles of the United Nations, then I think they should be part of a world organization.

BIBLIOGRAPHY

For material concerning the United Nations, the principal or teacher in charge should write the Chief, Educational Liaison Office, Department of Public Information, United Nations, N. Y.

The United States Mission to the United Nations will no doubt be be able to furnish some material of value to those who are making a study of the Program topic. The principal or teacher in charge should write for available material to the U. S. Mission to the United Nations, 2 Park Avenue, New York 16, N. Y.

The Department of State will no doubt be able to furnish some material of value to those who are making a study of the Program topic. The principal or teacher in charge should write for available material to the Public Services Division, Department of State, Washington 25, D. C.

The November, 1949, number of the University of North Carolina Extension Bulletin deals with the subject: "Building World Peace in the Atomic Age: What Are the Responsibilities of the United States in the United Nations and in the Atlantic Pact?" The price of this publication, which was used as the handbook for the Program of 1949-50, is 50 cents a copy. Address the University Extension Division, Chapel Hill, N. C.

The November, 1950, number of the University of North Carolina Extension Bulletin deals with the subject: "How Can We Help to Build World Peace in the Atomic Age?" The price of this publication, which was used as the handbook for the Program of 1950-51, is 50 cents a copy. Address the University Extension Division, Chapel Hill, N. C.

The November, 1951, number of the University of North Carolina Extension Bulletin deals with the subject: "Building World Peace: What Is the Responsibility of the United States in the Light of Communist Aggession?" The price of this publication, which was used as the handbook for the Program of 1951-52, is 50 cents a copy. Address the University Extension Division, Chapel Hill, N. C.

The November, 1952, number of the University of North Carolina Extension Bulletin deals with the subject: "Building World Peace: What Have Been the Achievements and What Are the Prospects of the United Nations?" The price of this publication, which was used as the handbook for the Program of 1952-53, is 50 cents a copy. Address the University Extension Division, Chapel Hill, N. C.

The November, 1953, number of the University of North Carolina Extension Bulletin deals with the subject: "Building World Peace: How Can The United Nations Prevent Communist Aggression and Preparation for Aggression?" The price of this publication, which was used as the handbook for the Program of 1953-54, is 50 cents a copy. Address the University Extension Division, Chapel Hill, N. C.

The American Association for the United Nations may be able to furnish material dealing with the topic under discussion. The principal or teacher in charge should write this Association at 45 East 65th Street, New York 21, N. Y.

Senators and Congressmen may be able to furnish from Congressional sources some material bearing on the topic under discussion.

Books

John Bauer—"Make the UN Effective for Peace"—Richard R. Smith, New York, N. Y. 1952. Price, $2.50.

John C. Campbell—"The United States in World Affairs"—Harper & Bros., New York, N. Y. 1947. Price, $5.00.

E. P. Chase—"United Nations in Action"—McGraw, Hill Book Co., Inc., New York, N. Y. 1950. Price, $4.50.

Columbia University Press—"Everyman's United Nations"—Columbia University Press, New York, N. Y. 1953. Price $1.50.

Vera M. Dean—"The Four Cornerstones of Peace"—Whittlesey House, New York, N. Y. 1946. Price, $2.50.

J. F. Dulles—"War or Peace"—MacMillan Company, New York, N. Y. 1950. Price, $1.50.

J. MacLaurin—"United Nations and Power Politics"—Harper & Bros., New York, N. Y. 1951. Price, $5.00.

F. S. C. Northrup—"The Taming of the Nations"—Macmillan Company, New York, N. Y. 1952. Price, $5.00.

Emery Reves—"The Anatomy of Peace"—Harper & Bros., New York, N. Y. 1945. Price, $2.00.

Clarence K. Streit—"Union Now"—Federal Union, Inc., 700 Ninth Street, N. W., Washington 1, D. C. 1949. Price, $1.00, paper edition; $3.00, cloth bound.

Periodicals

Foreign Affairs, volume 32, pages 203-216, January, 1954. "Revising the Charter." Ernest A. Gross.

Foreign Affairs, volume 32, pages 353-364, January, 1954. "Policy for Security and Peace." John Foster Dulles.

Foreign Affairs, volume 32, pages 525-540, July, 1954. "Leadership in World Affairs." W. Averell Harriman.

Foreign Policy Bulletin, volume 33, pages 4-5, October 15, 1953. "Should UN Remain a Major Plank in U. S. Policy?" J. B. Lee.

Foreign Policy Bulletin, volume 33, page 5, October 15, 1953. "Should UN Remain a Major Plank in U.S. Policy?" Mrs. Eleanor Roosevelt.

Rotarian, volume 84, pages 12-13, 50-54, June, 1954. "Should the U. N. Control Immigration?" Debate. L. D. Luckmann, J. R. Tiffany.

The Department of State Bulletin, volume 29, pages 559-562, October 26, 1953. "The United Nations In Focus." James J. Wadsworth.

The Department of State Bulletin, volume 29, pages 623-624, November 9, 1953. "Public Opinion and the United Nations." Robert Murphy.

The Department of State Bulletin, volume 29, pages 780-785, December 7, 1953. "The United States Looks at the United Nations." Robert Murphy.

The New York Times Magazine for May 16, 1954, pages 12, 26, 28-31. "Our Policy in the Far East." A Debate. W. F. Knowland, M. Mansfield.

United Nations Bulletin, volume 16, pages 338-341, May 1, 1954. "New Approach to Disarmament Amid Growing World Concern."

U.S. News and World Report, volume 36, page 132, April 23, 1954. "A Historic Decision." David Lawrence.

FILMS ABOUT THE UNITED NATIONS

The Bureau of Visual Education of the University of North Carolina Extension Division will be able to supply a number of films dealing with the United Nations or related topics to schools, clubs, or other organizations. For rental rates, address the Bureau of Visual Education, Abernethy Hall, Chapel Hill, N. C. A partial list of the films is given below:

"Our Stake in Troubled Morocco," running time 26 minutes.
"On Mediterranean Shores (Greece)," running time 20 minutes.
"The Peacebuilders," running time 10 minutes.
"The Middle East (Israel)," running time 10 minutes.
"Factories, Mines and Waterways (Western Europe)," running time 20 minutes.
"Trade and Industry (Great Britain)," running time 20 minutes.
"Middle East; Powderkeg on Rim of Communist World," running time 26 minutes.
"Spotlight on Mexico," running time 17 minutes.
"Germany Today," running time 26 minutes.
"Atomic Power," running time 10 minutes.
"Brotherhood of Man," running time 10 minutes, color.
"Japan, Island Nation," running time 20 minutes.
"Defense of the Peace, UN," running time 10 minutes.
"This is the UN, Part I," running time 15 minutes.
"This is the UN, Part II," running time 12 minutes.
"The UN in World Disputes," running time 21 minutes.
"Korea: Long Road to Peace," running time 20 minutes.
"Operation Ivy," running time 28 minutes.
"World Without End," running time 39 minutes.

NORTH CAROLINA INFORMATION CENTER FOR THE UNITED NATIONS

The University of North Carolina Extension Division operates an Information Center for the United Nations. The services of the Center at Chapel Hill include: the distribution of State Department and United Nations literature, about the Organization and its specialized agencies (i.e., UNESCO, FAO, WHO, etc.); a speakers' bureau; the rental of films, film strips, and other audio-visual education materials; library extension service; and other activities.

The Information Center, in cooperation with the University of North Carolina Library, assists North Carolina public and school libraries in providing local United Nations information services. In addition to the distribution of State Department and United Nations informational materials to the libraries, lists of other publications related to international affairs are provided and, if possible, furnished by the Center. A selected bibliography of related books and documents in the University Library, which are available to the participating libraries on a loan basis, is provided.

Requests for information should be addressed to R. M. Grumman, Director, University Extension Division, Box 1050, Chapel Hill, N. C.

UNIVERSITY OF NORTH CAROLINA
EXTENSION BULLETIN

VOL. XXXIV NOVEMBER, 1954 No. 2

Current Affairs
Reading Room

Tenth Series

LECTURES IN THE HUMANITIES

1953-54

UNDERSTANDING GREEK TRAGEDY
By Preston H. Epps

THE SYMBOL OF THE BIRD IN FLIGHT
By Alfred G. Engstrom

A DOCTOR LOOKS AT RELIGION
By Almonte C. Howell

THE UNIVERSITY OF NORTH CAROLINA PRESS
CHAPEL HILL MCMLIV

Extension Bulletins

Vol. XXVI, No. 1 *University Extension in Action.* By Russell M. Grumman. Price $1.00.

Vol. XXVIII, No. 3 *Lectures in the Humanities.* Fourth Series. Price 50c.

Vol. XXIX, No. 2 *Building World Peace in the Atomic Age: What Are the Responsibilities of the United States in the United Nations and in the Atlantic Pact?* Peace Handbook. Compiled by E. R. Rankin. Price 50c.

Vol. XXIX, No. 3 *Lectures in the Humanities.* Fifth Series. Price 50c.

Vol. XXX, No. 1 *Lectures in the Humanities.* Sixth Series. Price 50c.

Vol. XXXI, No. 2 *Building World Peace: What Is the Responsibility of the United States in the Light of Communist Aggression?* Peace Handbook. Compiled by E. R. Rankin. Price 50c.

Vol. XXXI, No. 3 *Lectures in the Humanities.* Seventh Series. Price 50c.

Vol. XXXI, No. 4 *Program Services.* Free.

Vol. XXXII, No. 2 *Building World Peace: What Have Been the Achievements and What Are the Prospects of the United Nations?* Peace Handbook. Compiled by E. R. Rankin. Price 50c.

Vol. XXXII, No. 3 *Lectures in the Humanities.* Eighth Series. Price 50c.

Vol. XXXII, No. 4 *The Strange Journey: A Demonstration Project in Adult Education in Prison.* By Richard McCleery. Price 50c.

Vol. XXXIII, No. 1 *Correspondence Instruction.* Free.

Vol. XXXIII, No. 1 Extra Edition. *Audio-Visual Aids to Schools, Colleges, Churches and Adult Study Groups.* Price 50c.

Vol. XXXIII, No. 2 *Building World Peace: How Can the United Nations Prevent Communist Aggression and Preparation for Aggression?* Peace Handbook. Compiled by E. R. Rankin. Price 50c.

Vol. XXXIII, No. 3 *Lectures in the Humanities.* Ninth Series. Price 50c.

Vol. XXXIII, No. 4 *Producing America's Outdoor Dramas.* By Samuel Selden. Price 50c.

Vol. XXXIV, No. 1 *The Role of the United Nations in the Building of World Peace.* Peace Handbook. Compiled by E. R. Rankin. Price 50c.

Vol. XXXIV, No. 2 *Lectures in the Humanities.* Tenth Series. Price 50c.

MONEY ORDERS, CHECKS OR STAMPS ACCEPTED
ADDRESS: UNIVERSITY EXTENSION DIVISION
CHAPEL HILL, N. C.

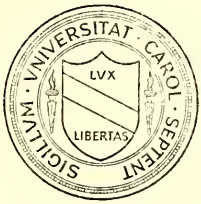
UNIVERSITY OF NORTH CAROLINA
EXTENSION BULLETIN

VOL. XXXIV NOVEMBER, 1954 No. 2

Tenth Series

LECTURES IN THE HUMANITIES

1953-1954



UNDERSTANDING GREEK TRAGEDY

By Preston H. Epps

THE SYMBOL OF THE BIRD IN FLIGHT

By Alfred G. Engstrom

A DOCTOR LOOKS AT RELIGION

By Almonte C. Howell

Published four times a year, September, November, January, and March, by the University of North Carolina Press. Entered as second-class matter October 19, 1921, Chapel Hill, N. C.

TABLE OF CONTENTS

Page

Foreword 5

Understanding Greek Tragedy
By Preston H. Epps 7

The Symbol of the Bird in Flight
By Alfred G. Engstrom 25

A Doctor Looks at Religion
By Almonte C. Howell 45

FOREWORD

Lectures in the Humanities began in 1944 so that members of the University faculty teaching arts and literature might present some of those materials to general audiences and particularly to undergraduate students. The Lectures have now rounded out a decade during which invited lecturers from a dozen University departments have contributed to the knowledge and appreciation of Chapel Hill audiences.

The lectures have not been commemorative speeches nor comments on current events. Their permanence of interest suggested that they be given the permanence of print and the wide circulation possible for a series of pamphlets. In their printed form the lectures have usually been accompanied by a list of background readings. Appropriately, the annual printed series has been issued through the University Extension Division, an agency of the University which goes to the boundaries of the State—and, in the spirit of humanistic learning, beyond all boundaries.

Raymond Adams
Werner P. Friederich
J. Coriden Lyons
Samuel Selden
J. Penrose Harland, *Chairman*
The Division of the Humanities
Committee on Lectures

Preston Herschel Epps is Professor of Greek at the University of North Carolina. He received the degree of A.B. in 1915, A.M. (in English) in 1916 at this University, and the doctoral degree, Ph.D., from the University of Chicago in 1928. After teaching Greek at the Boys High School in Atlanta, 1916-1928 (also serving as Assistant Principal the last seven years), he moved to Furman University where he was Professor of Ancient Languages, 1928-1938. In the latter year he came to the University of North Carolina as Associate Professor of Greek, and in 1942 he was appointed Professor of Greek in the Department of Classics.

He has written several articles on classical subjects, and in 1942 published a translation of *The Poetics of Aristotle.* He had charge of the revision of *Greek Literature in Translation* by Howe and Harrer (Harper & Bros., 1948) and also contributed the translation of several selections for this volume. The lecture printed here was delivered December 8, 1953 in Gerrard Hall.

UNDERSTANDING GREEK TRAGEDY

By Preston H. Epps

A fuller title for what I have in mind would be *Toward Understanding Greek Tragedy*. For you will never suppose, I am sure, that I think there is any one-and-only correct interpretation of Greek tragedy, or that if there is, that I have it. Nothing could be further from my mind than any such claim. There are however certain things which must be kept constantly in mind, it seems to me, if one is to have anything like a proper perspective from which to view these Athenian plays as the ancient Greeks seem to have viewed them. My purpose therefore is not to propose any final answers, but rather to discuss with you four indispensables, as I see it, for coming at these Athenian tragedies as nearly as possible as the Athenians came at them.

We will remember, of course, that there are many things which will always prevent us from ever entering perfectly into Greek thinking in this matter. But that is no reason why we should not make the attempt *just as far as possible*, remembering always, of course, the limitations by which we are beset. One formidable obstacle to a full understanding of Athenian tragedy, and one which I should like to offer as our first indispensable for best understanding what survives, is the small percentage of tragedies which have come down to us compared with what we are told were written. Only thirty-three have survived of the approximately three-hundred tragedies written by Aeschylus, Sophocles and Euripides, not to mention other tragic writers, such as Agathon, for example. We have therefore only slightly more than ten percent of the plays said to have been written by our three famous tragic authors. If commentators would keep this fact in mind, they would doubtless be more judicious in their statements, and readers would be spared many useless off-hand generalizations. For example, because some statement or idea does not appear in any of the surviving tragedies of Aeschylus, we hear some critics declaring in all confidence that "we know that Aeschylus could never have said or thought anything like that." Such statements take no account of the seventy-five or eighty plays of Aeschylus which have been lost. These statements are therefore more calculated to mislead than to lead correctly, since they are too broad and too meagerly founded to induce accurate conception.

It is sometimes argued that we have in what has survived all that is necessary to a full understanding of Athenian tragedy. Such arguers generally take some more recent author, Shakespere for example, pick out a few of his plays and try to show that all the essentials of Shakesperian tragedy are either patently present or clearly latent in these few plays. Therefore, they argue, we do not need the complete works even of an ancient playwright to arrive at a full understanding of his work. Such pleaders forget that the selections they offer are made from and on the basis of a complete corpus, whereas the surviving Athenian tragedies are themselves a selection, slightly more than ten percent of what is known to have been written—a selection made more than twenty-two hundred

years ago, from just how full a corpus and on what basis we do not know.

The incompetence of such arguments can be shown, it seems to me, from what has survived of Athenian tragedy. If we did not have the portrayal of Zeus that we do have in Aeschylus' *Prometheus Bound*, men would easily "prove" that Aeschylus could not possibly have written a play so portraying Zeus. His portrayal of Zeus in his surviving plays is too different, they would say. In fact, in spite of the ancient evidence to the contrary, some scholars deny Aeschylean authorship of the *Prometheus Bound*. Wilhelm Schmid for example (1. Geschichte der griechischen Literatur, 1.2 (Munich, 1940), p. 193), declares outright that "the *Prometheus Bound* was neither written by Aeschylus nor during his time." Furthermore, if the *Eumenides* had survived by title only, is it very likely that any one would ever have surmised that Aeschylus would have worked out as he did the problems left unsolved in the *Choephori*? If Sophocles' *Philoctetes* had not been preserved, men would readily have "proved" that Sophocles would never have resorted to so slothful a means of resolving a tragic situation as the *deus ex machina* is. But as Professor Waldock says, in spite of all the efforts to differentiate it from the Euripidean practice, there it stands, a real *deus ex machina* in Sophocles. Furthermore, if no details of Euripides' *Supplices* had survived, any one who would have suggested that Athenian tragedy ever used anything like the Indian suttee would have been laughed out of court. Yet there it is in Euripides' play. Although other anomalies could be adduced, these should be enough to show that, barring further discoveries, our knowledge of Athenian tragedy must remain definitely limited. We do have plays from the mature years of each of the dramatists, and it may very well be that we have the better plays written by each. But even this cannot be proved. A more complete selection might very well compel us to modify in important ways our present conceptions even of these better plays, if they are the better ones. Just think what a full corpus of the plays used by Aristotle would do for our understanding of the *Poetics* and therefore of Greek tragedy? In the light of these facts, our statements regarding Athenian tragedy should always be prefaced by the reminder that "on the basis of what has survived of Athenian tragedy" such and such seems to be true. And I should like you to remember that all that is said here is so prefaced in my own mind, and will be, I hope, in yours also.

II

A second indispensable for understanding Athenian tragedy is recognition of the fact that, from Homer through the fifth century B.C. at least, the Athenians accorded their poets the first place in their scheme of education, and demanded of their poets that they be teachers of "the good and useful" just as insistently as they did that they be artistic craftsmen. Such a didactic purpose is obnoxious to moderns, so much so that they are quite ready to question such a demand even among the Greeks. But few things are better documented in surviving Athenian thought than this teaching function demanded of their poets. As Aristophanes and Plato make clear, the Athenians made this demand of their tragic poets espe-

cially, who were "to be teachers for the grown-ups just as those who point out things to children and advise them are their teachers" (*Frogs*, 1054-6).

This special demand of the Athenians upon their tragic authors is not as unnatural as it may seem to modern critics, especially to those who advocate art for art's sake. Art for art's sake seems to have been a foreign conception to the Greeks prior to the fourth century B.C. at least. Professor Hadas has it right, I think, when he says (2. *A Hist. of Greek Lit.*, p. 4): "The concern with only the eternal verities of pure art, which an earlier generation of critics attributed to the Greeks, is wholly imaginary. . . . Only the Euphuistic Alexandrian poets, sheltered from the world by Ptolemy's Museum, produced art for art's sake." Furthermore, most societies develop some means of teaching publicly their conception of the moral set-up and demands of the cosmos, and their own moral and spiritual feelings and aspirations. Although the Athenians never developed any particular means for this purpose only, I have long wondered if their drama did not serve this purpose so well as to make additional means somewhat superfluous.

This Athenian demand of their poets that they be teachers of the community is explicitly stated in Aristophanes' *Frogs* (1006-74) during the debate between Aeschylus and Euripides. Euripides readily admits that poets are to be admired most "for their skill and advice and because they make better the men in the states" (1012-14). Aeschylus then catalogues his own services as teacher together with the services of Orpheus, Musaeus and Hesiod. And Homer's glory, he says, sprang from the "good and useful things" he taught men. The parabasis was a technical part of comedy in which the poet could speak through the chorus directly to the audience. The members of the chorus in the *Frogs* (686) explicitly say, as they begin their parabasis, that "it is right for the sacred chorus to teach, and give the state good and useful (chresta) advice."

Plato also testifies in no uncertain terms to the fact that the Athenians still regarded their poets as community teachers even in the fourth century. His so-called banishment of Homer in the tenth book of his *Republic* is a standing puzzle for most readers until this concept of the Greek poet as the community teacher and Plato's concern about it are understood. Plato makes it plain early in the tenth book of the *Republic* (598 de.) that it is really tragedy, and Homer as the *first leader and teacher* of tragedy, that he is objecting to. Tragedy was seen and was admitted to be an imitation of an action which could represent men as better, or worse, or just as they were. Plato's passion for beholding and contemplating reality as directly as possible made him impatient of imitations. Moreover, his exaltation of reason and intellection made him distrustful of anything which tended to give a superior place to feelings and emotions and take them out from under the control of reason. All this put Plato theoretically at loggerheads with tragedy on two fundamental counts: (1) first because tragedy was really an imitation of one segment of reality rather than reality itself, and (2) secondly because it was written in poetry, which never demanded the regnancy of reason over the feelings and emotions. For Plato therefore, as Professor Jaeger says (3. *Paideia*, II, p. 359), tragedy could neither create nor could it reduce unwieldy matters to order, but could only

represent or imitate something that had already been created and reduced to order. Tragedy therefore could not, and should not, as Plato saw it, compete with philosophy guided by reason, as the supreme teacher for man.

Thus, although the poets, especially Homer, had been regarded for centuries as the teachers par excellence of Greece (Xenophanes, *Frag.* 9), by the fourth century B.C. we have philosophy under the insistence of Plato laying claim to the position of supreme teacher for the Greeks. In this claim, philosophy was at war with poetry in general and with tragedy in particular. Plato felt compelled therefore to banish Homer, the supreme teacher and introducer of tragedy, from his state which was to be ruled by philosophy and philosophers. All of which stemmed from the feeling and recognition of the poet as the supreme teacher among the Greeks, and is a further indication of how insistent and pervasive this feeling was.

III

A third indispensable for the best understanding of Athenian tragedy is as accurate a conception as possible of the role of omens and oracles in Greek life generally and in Athenian tragedy in particular. For many Athenian tragedies are involved in one way or another with omens and oracles, and the role of omens and oracles in them constitutes a most vexed and most vexing problem, just as the role of fate does. It is insoluble, of course, because it is impossible to determine conclusively whether the omens and oracular prophecies are *mere concomitants* of the action or are predetermining causes of it. It is much like praying for rain. No one ever has proved (or ever can prove) that any rain ever came because of or as a result of prayer for rain. There is always the possibility that the prayers were mere concomitants of the rain—that they were offered just when it was going to rain anyway.

Yet many, if not most, discussions of Greek matters involving omens or statements of oracles proceed on the assumption that omens and oracular statements were implicitly believed in by all the Greeks and considered just as certain of literal fulfillment as the operations of nature are. These discussions seem to assume that the Greeks had only two attitudes towards omens and oracular statements—(1) an unquestioning, one-hundred per-cent belief in their inerrant accuracy and possible fulfillment, or (2) total disbelief in them. But the fifth-century Greeks seem to have had all the gradations of belief between these two extremes. Their attitudes toward omens and oracles and the regard in which they held them seem to have varied as widely and as intensely as twentieth-century attitudes have varied toward the Bible and religion and the regard in which these are held.

Greek oracles and omens seem to have been consulted, with varying satisfaction, on almost every conceivable subject, from high state policy down to which twin was born first, much as Vergil was consulted during the Middle Ages. Their omens and oracles were much criticized by the Greeks themselves, especially during the fifth century, when our surviving tragedies were written. One of the most meticulous of such denunciations is in Euripides' *Helena* (744-57), written about 412 B.C. But even as early as Homer, a rather clear omen against continuing a battle is defied

by Hector with his famous reply to Polydamus (*Il* 12:263) that the best omen is to fight for one's country. Herodotus hints quite broadly (5:63 and 6:66) at the venality of those who delivered oracles. We are told (Her. 5:62:3) that Delphi could, apparently for a price, side now with an Athenian faction, and now with the Spartans (Thuc. 1:128). Herodotus speaks three times of counterfeit oracles (1:66 and 75, and 5:91). Although Aeschylus and Sophocles show a greater faith in the validity of oracles and the power of fate than Euripides does, Aeschylus allows his chorus (*Agam* 1130-35) to comment on how hostile oracular statements are to mortals, compelling men to learn fear through evil. Jocasta's and even Oedipus' avowed scepticism regarding oracles (*O.T.* 720 & 964 ff), although erroneous, seems to represent a general attitude rather than a mere personal one. But Euripides more than once (*Ion* and *Iph-T* 712) accused the Oracle at Delphi of outright deception, and in his *Andromache* (1164), he charges the god of Delphi with being as vindictive and grudge-remembering as any wicked mortal.

We can see therefore what erroneous conceptions and interpretations must ensue, if these Athenian tragedies are approached on the assumption that every Greek implicitly believed that Greek omens and oracles were inerrant, destined to literal fulfillment, and should therefore be accepted and obeyed, no matter what they commanded. The fact is our conceptions of deity have been so molded by Hebrew ideas of deity and the perfect rightness and inexorability attributed to the commands of the Hebrew deity that we easily slip into the belief that the Greeks had much the same feeling towards their gods and the demands of their gods. But this seems quite contrary to the facts.

In the first place, the Athenians did not consider their gods wholly good and righteous. Such a doctrine was not unambiguously set forth until the late fifth and early fourth century B.C. by Democritus, Socrates, and Plato. The Athenians felt that their gods were capable of wrongdoing and of commanding wrong conduct. They did not think therefore that either their gods or their gods' commands should be always obeyed. In fact, a Greek called to account for some downright immoral behavior could frequently cite some god, even Zeus, as guilty of similar or just as questionable conduct. If the commands of their gods were reasonable and just, the Greeks felt and urged that they be obeyed. If their demands and prophecies were clearly unjust, they could disregard and even oppose them. It might prove perilous and even disastrous to oppose them. But Prometheus, Diomedes, Oedipus, Hippolytus, and Pentheus all opposed a god or oracle. Prometheus and Diomedes won out in the end, whereas Oedipus, Hippolytus, and Pentheus paid dearly for their opposition. But even so, except for Pentheus, I have a strong suspicion that the Athenians would have acquiesced in, rather than condemned, their opposition. In the *Choephori* (269 ff), Apollo had to threaten Orestes with three most terrible punishments to make sure he would obey. And even then, Orestes had to be re-confirmed in his purpose before he would kill his mother. Yet even so, I still wonder if it was not the old time-honored practice of blood vengeance rather than Apollo's command that drove him to the deed.

Mr. H. W. Parke in his *History of the Delphic Oracle* (1939), (pp. 302 and 324) classifies the oracles connected with Delphi as follows: (a) stock oracles for relieving plagues, famines, and imminent disasters, (b) those asking about the most advantageous marriage for a daughter or about the birth of a son, and (c) those invented after the fact to account for some previous fact or experience—some tomb, or cult, or special function such as Delphi's claim to special powers of purification from blood-guilt. But even this neat classification leaves much about these oracles that is puzzling. (1) In the first place, they have come down to us generally in dactylic hexameters. Now the priestesses, delivering these oracles under the afflatus of a god, can hardly have uttered them in such orderly metrical form. Consequently, we are faced, as Mr. Parke says (p. 37), with this insuperable problem as we strive to estimate correctly Greek feeling toward oracles. "The confused and disjointed remarks of a hypnotized woman," he says, "must have needed considerable exercise of the imagination to reduce them to this metrical form of response. And where in the actual replies of the priestess must those responsible for reducing these responses to a formal metrical statement have drawn the line and merely read into the Pythia's gabble their own personal thoughts and interpretations?"

(2) In the second place, the *ex post facto* element, which is readily discernible in some oracles, highly possible in others, and tantalizingly tempting in still others, is a frequent source of botheration in evaluating Greek oracles. A good example of the tempting and puzzling type of oracle is the one concerning Oedipus. The more I read this story the more difficult it is for me to shake off a feeling of an *ex post facto* element in it. The great importance attached in early societies to having a legitimate male heir made it natural for Delphi to be frequently consulted about the birth of a son. Mr. Parke reminds us (p. 303) that the oracle to Laius has survived in several different versions, "none very primitive." As this oracle appears in the hypothesis to Sophocles' *Oedipus Tyrannus*, in Euripides' *Phoenissae*, and in the Greek Anthology (14, 67), it says only that Laius was destined to leave the light by the hand of his son as a result of the curses Pelops called down on Laius for stealing Pelops' son (Chrysippus). This oracle says nothing about Oedipus' marrying his mother and having children by her. This omission is so glaring and regular, until the fifth century B.C., that Carl von Robert argues (4. *Oidipus, Geschichte eines poetischen Stoffs im griechischen Altertum* (1915)) that the original oracle prophecied only Laius' death by the hand of his son and that all the other parts of the oracle were added later for dramatic purposes. His Märchen style version of the story (p. 64-5) is certainly attractive, and even convincing. Mr. Parke thinks (p. 305) that the legend of Oedipus originated in a folk-tale without much local reference and was later made to emanate from Delphi. He declares (p. 304) that some evidence shows that the part about Pelops' curses on Laius for stealing Chrysippus "was invented by Euripides towards the end of the fifth century B.C." What is said to be an older version of the story has Oedipus kill Laius and marry Jocasta but without offspring. In this version, Oedipus' children are by a later wife, Eurygenia.

However all this may be, there are three things we know about the Oedipus story: (1) first, that the writer of the *Odyssey* had heard the story of the mother of Oedipus (Epicaste=Jocasta), who had unwittingly married her son after he had killed her husband Laius (*Od.* 11:271-80), but says nothing about offspring by Oedipus. (2) We know secondly that Sophocles emphasizes, almost to a fault, in his three plays on the subject, both Oedipus' slaying of Laius, his later marrying Jocasta, and his having four children by her before either he or Jocasta discovered who Oedipus was and what he and she had unwittingly done. (3) We know in the third place that Aeschylus knew the story much as it appears in Sophocles' play. All of which means that the Oedipus story in all its Sophoclean features was known by the early fifth century, and all but the part concerned with incestuous offspring was known by the time the *Odyssey* was written—early eighth century perhaps.

But this question still intrudes itself: instead of Oedipus' misfortunes being an experience resulting *causally* from the dictation and required fulfillment of an oracle, why could his storied experience not rather have been, as Mr. Parke says, an embellished folk-tale which, because of its highly improbable and exciting nature, was later attributed to an oracle so as to give added credibility to the story and at the same time lessen the odium attaching to Oedipus' unwitting acts? Jocasta must have been referring to folk-lore material when she reminds Oedipus (981-2) that "many men ere now have mated with their mothers in dreams." There is a kindred type of story in the case of Aegisthus, who is said to have been the son of Thyestes by a long lost and therefore unrecognized daughter of his, Pelopia. In fact, when one considers the likely peregrinations of early man, it would not be beyond the realm of the possible, (no matter how improbable), for some person to have had some such experience as Oedipus is said to have had. And if it ever came to be believed that some person did have such an experience, it would be quite natural for early man to attribute such extraordinary misfortune to some god, and then to some demand of a god, or oracle. When we add to all this the ambiguous oracular statements which would turn out to be true no matter what happened, and those which were so vague or far-fetched that almost any happening could be "proved" to be a fulfillment, the confusion concerning oracles and Athenian feeling toward them is about complete. And I, for one, cannot get much help from Mr. Waldock's oversimplification of the subject in his book on Sophocles, when he suggests (p. 167) that "one simple reason for the frequency of oracles in drama is that oracles are excellent story material."

IV

The final indispensable I should like to speak of is the role of fate in Athenian tragedy. This presents about the most pressing and at the same time the most difficult and the most insoluble of all the problems presented by Athenian tragedy. How difficult and hydra-headed this subject is can be seen in Professor W. C. Greene's extensive and well documented volume *Moira* (1944) which deals with the problem of Fate, Good and Evil in Greek Thought. The role of fate in Athenian tragedy is

most difficult to understand for at least three reasons. (1) First of all because, as Professor Shorey has warned (5. *C.P.* XVI, no. 3, July 1921, p. 280), "there is no final consistent philosophy of fate, fortune and providence which can be applied as a canon to measure the deviations of earlier thinkers from perfect consistency." I suppose it would be literally true to say that there are as many vagaries in man's conception of fate as there are men. What one person attributes to fate another will attribute to something else. Consequently, this question of the role of fate in Athenian tragedy can never be settled scientifically or statistically by any fixed rule or rules.

(2) The second thing which makes the role of fate in Athenian tragedy difficult to pin down is the number of Greek words which are translated by the English word fate. I have noted at least ten such words, exclusive of *tyche*, meaning chance or fortune, which is often associated with fate. There are five words with the fundamental idea of apportionment or of having a certain something or amount of something allotted to a person. These words are: the nouns *moira, moros, aisa,* and the verbs *heimartai,* (*meiromai*), and *peprotai* (proein). Another word is *potmos* (pipto), indicating that which befalls one. Still another word is *chreion,* meaning that which is declared by an oracle and is therefore destined to happen. There is also *anagke,* denoting constraint, compulsion, enforced necessity. Still another word is *symphora,* meaning that which is brought together upon one, or happens to one. And finally the word *daimon*—the spirit guide assigned to a person, according to Plato *(Rep.* 620 d), to help that person carry out the type of life he chooses for himself. Thus when Sophocles has Oedipus tell Polyneices that his daimon has his eyes upon him, Jebb translates it: "the eyes of fate are upon you." Oedipus seems to mean only that Polyneices' daimon is urging him on to the decision he has made. I suspect that a more extensive search would reveal still more Greek words translated into English by the word fate. But these should be sufficient to show how unclear this subject is, and that it is apparently destined to remain so.

(3) The third difficulty with this problem of fate in Athenian tragedy, (and in life, for that matter), is its inherent affinity with the question of free will, which in turn often shades over into such knotty kindred problems as predestination and absolute determinism. We know how insoluble the question of free will is. For, as Dr. Johnson has said (6. Boswell's *Life,* April 15, 1778): "All theory is against free will; all experience is for it." In similar, though opposite, fashion, theory easily marshalls itself on the side of total determinism, even though experience is against it. For the determinist can "prove" theoretically that there is no such thing as free will, and then turn right around and say to someone "You shouldn't have done that. You should have done this." A similar confusion has dogged the interpretation of Old Testament prophecies. The strict predestinarian will argue that the particular person, Judas Iscariot, was personally marked and thus doomed, even before he was conceived, to betray Jesus of Nazareth. But another person will more plausibly argue that the prophecy was not specific but only meant to say, much as Plato says (*Rep.* 361e), that whenever so good and so just a person shall appear, someone

having the character, motives and purposes which Judas had developed and espoused will betray him, *even though he is in no way compelled to do so.* For, as Dr. Johnson further implies (ibid.), anyone with a thorough and intimate knowledge of a person can frequently predict how that person will act and react *without the person's being compelled in any way by the prediction.*

But not only is experience against total determinism and on the side of free will. One finds also psychiatrists, and I suspect psychologists, who agree with experience. For example, Dr. Rollo May, chairman of the Joint Council of New York State Psychologists, in his book entitled *Man's Search for Himself* (pp. 160-2), readily acknowledges "an infinite number of deterministic influences in everyone's life." In fact, I got the impression that he did not think there was anything which was wholly free of deterministic influences. Professor May holds also that "consciousness of self gives man the power to stand outside the rigid chain of stimulus and response, and pause, and by that pause to throw some weight on one side or the other" of a dilemma, and thus have some voice in what his response shall be. This power to stand outside the rigid chain of stimulus and response and look before and after "enables man to recall how he acted previously, and thus influence, even if ever so little, how he will act today." Therefore, concludes Professor May, "no matter how much one argues for the deterministic viewpoint, he still must grant that there is a margin in which the really alive person can be aware of what is determining him. And even if only in a very minute way to begin with, he can have some voice in how he will react to these deterministic factors." Here we have a modern man, well versed in the field, facing up fully to the reality of determinism, yet finding room for some choice and freedom. His conclusion seems to be that there is no such thing as a rigidly complete determinism, or a completely unconditioned freedom. Both are realities, but limited realities.

All these facts should help us to see how fundamentally different of solution the problems of free will, determinism, predestination, and prophecy can be. Conceptions of free will and complete determinism seem to be much like the mathematical proposition of approaching a limit by only half the remaining distance to it: they can be "proved" to be one way in theory but another way in practice. Their ambivalence makes them capable of more than one interpretation. The same thing is true of prophecies and oracles so frequent in discussions of fate. Their ambivalence makes it possible for them to be interpreted, from one point of view, as a predetermined blue-print of future events, with all the details specifically written in by the cosmic Architect. Or, from another point of view, they can more reasonably be considered only a prescient looking ahead, and, through knowing how men of a certain character will act, merely seeing and announcing beforehand what such men will do, *even though they are neither cosmically destined nor required to do just that and nothing else.*

Now this question of the role of fate in Athenian tragedy is just as complex, unspecific, and ambivalent as is the problem of free will, determinism, and prophetic statements. In the first place, it can never be proved that there is any such thing as a fated or previously decreed course

of fixed action for each particular or for any particular individual. The truth may very well be as the fifth century Greek philosopher, Democritus, says (Diels, 119): that "Men fashion for themselves a thing called chance as an excuse for their witlessness and lack of judgment. For chance," he says, "seldom conflicts with intelligence." Or as some modern has put it: "Men heap together the mistakes of their lives and create a monster they call Fate." According to these statements, what men have called fate may in fact be only one of man's grandiose rationalizations to excuse his acts of passion, stupidity, or ignorance.

But, since man's life seems neither wholly determined nor unconditionally free, there must be fixed and unalterable elements in every one's life, as well as some freedom of choice and action in most areas of living. Man is therefore not chained to any one predetermined response to each stimulus he may be subjected to. If this is so, then we are faced with the second barrier to a clear understanding of the role of fate in Athenian tragedy (and in life, for that matter). It is this: if man is born conjoined to a limited fixed fate, which he can neither thwart nor alter, as well as to a limited freedom of choice and action, it is still impossible to tell which of his acts are related *as cause and effect* to the unalterable fated elements in his life and which to his freedom of choice and action.

Now this duality of fixed or fated elements together with much freedom of choice and action is just what the Greeks saw, it seems to me, and they were intrigued by it. At just what point, they seem to say, or in just what phases of living does what is fixed and fated in man's life end and man's freedom of choice begin? This seems to be the basic problem underlying Greek tragedy. For, as Professor Jebb said some years ago (7. *Proceedings of the British Academy* (1907-8), vol. III, p. 345), "the subject of Greek tragedy in all its forms, in all the fables over which it ranged, was the conflict between free will and destiny, between an absolute inward liberty and an inexorable external necessity." Professor Greene says much the same thing (p. 92).

This may not seem true to one who reads the Greek tragedies for the first time. But the more carefully one examines the plays and the more one weighs all the evidence they offer, the more, it seems to me, one will find this statement of Jebb's true. Notice that I say: "weighs the evidence as a whole." This is important in considering any genre of literature. But it is especially important for anyone trying to penetrate the basic interest and purpose of Greek tragedy, and there are a few things which we should not allow to confuse and mislead us as we try to see these Greek tragedies as the more alert Athenians *seem* to have viewed them.

(1) First, as Professor Shorey has warned, we must not expect logical consistency in a literature like Greek tragedy any more than we do in the Bible, for example. This is especially true of writings concerned with spiritual matters, as Greek tragedy is. Moreover, the very nature of spiritual matters tends to invite apparent inconsistencies in discussions dealing with them. For things which pertain to the human spirit and its *modi operandi* are by nature less objective and more subjective than many other things with which man deals. They can neither be isolated, weighed, photographed, measured, nor otherwise handled concretely. All of which

does not make them any less essential or any less important for the happiest and best adjusted life for man. Consequently, we must not give spiritual matters up merely because they are so intractably unamenable to genuine scientific analysis and comprehension.

(2) In the second place, we must not be misled by some despairing character's cry that it is "some grey old crime" of his ancestors, or some curse upon his house, or some god's anger at his race that has brought disaster upon him or his house. Such anguished cries from such characters in periods of excessive discouragement are frequent, if not regular, in dramatic literature. It is like Job's exclaiming (9:13) that "God will not relinquish his anger"; that He is indifferent to wickedness and to the prayers of the oppressed (Ch. 24); that He is not interested in justice (19:7). We must not be misled by such exaggerated and discouraged statements.

(3) Finally, we must not be misled by statements which attribute inordinate passions in individuals to some enforced visitation of some god or goddess—rationalizations such as we hear even today when men blame their crimes on the Devil, or a witch, or on being hexed by some one. Such explanatory patterns for reprehensible conduct should no longer deceive us; for to attribute to some malevolent or vindictive deity what is now ascribed to persistent and uncontrolled desire in the individual represents a pattern of thinking in early societies which is now well-known to anthropologists and folklorists. As Miss Abby Leach timely observes (8. "Fatalism of the Greeks," *A.J.P.*, 36 (1915), p. 386), "the god or goddess who influences any particular person and holds sway over him is always one that is in accord with the person's own nature." Thus Dionysus can be portrayed as saying that he has driven the Theban women from their homes, after they have refused to take part in his worship voluntarily. In similar fashion, Aphrodite can claim (and Artemis can corroborate) that she inspired Phaedra, against Phaedra's will, with an inordinate passion for Hippolytus merely to get vengeance on Hippolytus. One of the earliest such rationalizations of blame-worthy conduct was the blaming of Helen's conduct on Aphrodite (*Andro.* 680).

But Xenophanes and the pre-Socratic thinkers had done their work by the time Greek tragedy as we know it came into being. And Hecuba's statement in *Troades* 981-2 seems far more consonant with what must have been the feeling of many fifth century Greeks toward this blaming of one's nefarious conduct on some diety. After Helen has resorted to this old rationalization of her conduct, Euripides has Hecuba say in reply to Helen: "Don't portray goddesses as ignorant and boorish in order to put a good complexion on your evils. For men of sense and culture won't believe you." (Murray says: "The wise may hear you and guess all.") In similar vein, Euripides has Andromache (229-30) warn Hermione not to try to surpass her mother (Helen) in hankering after men. In the same play, Peleus also (*Andro.* 595; cp. 621) calls Helen the basest of women, which he could hardly have done, if he had accepted her explanation.

Moreover, although this old pre-epic version of Helen's being forced by some deity to do what she did is mentioned by several Greek authors, no tragedian attempts to treat it in any extensive way, whereas the Greek

tragic authors do treat other more rationalistic versions. For example, the old variants given by Stesichorus (ca. 640-560 B.C.) and Herodotus (2:112-120) are extensively worked out in Euripides' *Helena* (ca. 412 B.C.). In this play Helen tells how universally she was detested, how her mother committed suicide because of her (Helen's) conduct, and how no one will marry her daughter for the same reason. Even Homer (*Il.*, 3:241-3) has Helen suggest that her brothers, Castor and Pollux, are not in the army at Troy because of the shame and taunts they would have to suffer because of her. All of which shows that the Greeks must not have taken very seriously this epic conceptual machinery by which unseemly conduct could be palmed off on some god.

Such dissident elements in Athenian tragedy should not surprise us too much, when we remember that every situation treated in every surviving Athenian tragedy, except the *Persae*, belongs in time to the thirteenth and twelfth centuries B. C., whereas the tragedies were written in the fifth century and addressed to fifth century Greeks, in the light of fifth century morality. In such cases, traditional elements as well as traditional conceptual and verbal patterns are naturally retained and thus often mentioned. But this does not mean that such elements were always accepted—certainly not at face value. The way Bible stories and situations are treated and have to be treated today by those still interested in them should instruct us in this matter, and help us thread our way more wisely through this traditional material which the Greeks used as a framework for studying and considering their fifth century questions and problems.

What then does a reasonably careful reading of these Athenian tragedies seem to show Athenian feeling was regarding this question of fate—matters in which man had no freedom or choice whatever? They may not have been quite as clear in their thinking about fate as I shall now try to state it, but they seem to have been at least on the verge of realizing three things about fate and fated elements in life and living:

(1) They saw, first of all, that there are many phases of life which are wholly and irrevocably fixed and unalterable, as far as man is concerned. In such matters, man has no choice, no vote, no freedom whatever. The particular race one is born into, from what parents, one's infant environment, the workings and calamities of nature, the character bent with which one is born, and all that has already happened are examples of fated elements in which a man has no choice or vote at all. Man can, of course, try to change or rectify what has already happened, but he cannot do anything in the present to keep anything from having happened as it did happen in the past. All such elements in life are irrevocably fixed or fated as far as man is concerned.

(2) In the second place, the Greeks were at least on the verge of realizing that there are many areas in life and living in which man has much freedom of choice, and an important vote—the final vote. Whether one will marry or not, whom one will marry, what one's life work shall be, where one will live and do one's work, one's diet, the friends one will cultivate, and whether one shall be a person of unquestioned integrity or merely follow the dictates of expediency are matters in which man regularly has much lattitude of choice. Let us not forget, though, as we saw earlier,

that even where man has a choice, it is not a pure unconditioned choice but is to some extent a conditioned one. But even the Greeks must have seen that a conditioned choice is different from no choice at all, and much better.

(3) Finally, the Greeks must have seen that many areas of life and living lie between these two extremes of no room for freedom of choice and much room for freedom of choice. The gamut runs from no choice, to a little choice, to more choice, and finally to much choice. The amount of freedom of choice will vary with the time, place, circumstances, and the group set-up chosen to live by. Illustrations here are more difficult to locate. Perhaps the best type of monarchy, a limited monarchy, and the most democratic type of democracy will illustrate a little freedom of choice, more freedom of choice, and much freedom of choice, provided we remember that all genuine freedom is limited, since unlimited freedom quickly degenerates into lawlessness. Some such division as this seems to me a necessary prerequisite to the truth about fate and freedom of choice in life and living. It seems to me to represent also what the Athenians were seeing, even if not with full clarity, in the tragic situations they portrayed.

One of the clearest indications to me that the Athenians believed that man generally had some freedom of choice and responsibility in most situations in life is the way in which some character or characters assume or are made to assume, toward the end of the extant plays, responsibility for the tragic plight prevailing at the close of the tragedy. To document this fully would require that we examine each of the thirty-three surviving plays. But there isn't time for that. We must be content therefore to look first at a few of the plays, and then at two of the most difficult stories.

In the *Persae*, the ghost of Darius (734-51; 897-12) places the responsibility for the Persian disaster on Xerxes' rashness and youthful bravado. Prometheus freely acknowledges that he did what he did of his own free will and choice. Clytemnestra not only declares the murder of Agamemnon and Cassandra her own carefully designed deed, but she exults in it. Ajax (445-55) assumes full responsibility for his attempt on the Greek leaders and regrets only that Athena thwarted him (387-8). In *Antigone* Creon blames himself only (1317-20; 1339-42) for the catastrophies of that play. Medea plainly accepts full responsibility for her act when she says (1078-80): "I understand the evils I am on the verge of doing. But angry passion, a cause of greatest evils for mortals, has overridden my sober reasonings". In the *Bacchae*, one of the latest of the extant plays, Euripides has Cadmus very carefully admit (1247) that Dionysus has ruined them "justly but too completely". Cadmus and Dionysus put the blame for the disasters in this play on Pentheus and Agave. But the clearest instance of centered responsibility is in the *Hippolytus*. In this play, Artemis uses nearly fifty lines (1296-1341) to center in meticulous detail responsibility for this tragedy, and she puts on Theseus the full blame for Hippolytus' death. She calls Theseus a most base person who has impiously used against his own son one of the curses given him to use against enemies. Although she tells Theseus that Phaedra's passion for Hippolytus was inspired by Aphrodite, she plainly says (1304-6) that

Phaedra's death and her charges against Hippolytus were the result of the officiousness of Phaedra's nurse, who, without Phaedra's knowledge and against her wishes, informed Hippolytus of Phaedra's plight. Hence, although the plot was Aphrodite's, it was apparently executed through freely operating human agents who could and should have acted otherwise. Thus, in one way or another, every play, as far as I can recall, has some one of the important characters either acknowledge the responsibility for the tragedy as his own, or fasten it on some other character in the play. This can happen even in comedy. When Strepsiades in the *Clouds*, for instance, tells the Clouds (1449-50) that all his troubles emanate from them since he entrusted himself wholly to them, they tell him that he alone is the cause of his woes, and Strepsiades accepts their judgment.

But the most difficult by far of all the tragic situations in Athenian tragedy, and the ones which have given Greek tragedy its greatest aura of fate, are the experiences connected with the house of Atreus and the house of Oedipus of Thebes. Although some member of one of these two houses appears in more than half the surviving tragedies, the plights of Oedipus and of Orestes are the ones which seem to allow the least choice, many say no choice at all.

Let's look first at Orestes' situation. According to a well known primitive pattern of justice, Orestes, through his mother's cold-blooded murdering of his father, was put in the position of having to kill his mother. Threo surviving plays, Aeschylus' *Choephori*, Sophocles' *Electra*, and Euripides' *Electra*, show him carrying out this repugnant duty. In the *Choephori*, Orestes is most reluctant to kill his mother, and has to be steeled to it by several things: Apollo's triple threat of bodily putrefaction, ostracism and haunting fiends; Electra's plight and goadings; the dream his mother had had; and finally the admonition of his dearest friend, Pylades. In this play, Orestes has no stomach for this task, whereas in Sophocles' portrayal he shows no qualms whatever but goes steadily about his task. In Euripides, he not only falters again but complains at length about the injustice of the god's command that he kill his mother. He has to shut his eyes to execute the deed.

Now the question is this: how do the Athenians seem to have regarded Orestes' plight? Did they think that he had any freedom or choice as to whether he would kill his mother or not? We can never be sure beyond question. But there are some things which it will help to keep in mind. (1) In the first place, Orestes and his family lived not later than the first part of the twelfth century B.C., whereas our earliest drama involving Orestes was written near the middle of the fifth century B.C., more than seven centuries later. (2) in the second place, even in fifth century Greece revenge was regarded not only as a duty but as an honorable duty. The Greeks therefore would not have some of the qualms many moderns should have twenty-four centuries later. Moreover, the poor estimate of women and the low position accorded them by fifth century Athenians would cause the Athenians to regard Clytemnestra's crime as even more heinous and her death by her son somewhat less repugnant than modern persons would. Yet in spite of these justifying factors, even in the earliest play, Orestes is portrayed as both talking and acting as though he

could refuse to kill his mother, and is in fact so inclined. He can refuse to do the act, but at a price. Notice what it takes to persuade him to kill Clytemnestra. It takes Apollo's direful threats, nearly 250 lines of persuasion in excited lyric metres, a drawing out of Electra's plight, a recital of the arrogant usurpations of Aegisthus and Clytemnestra, his mother's clearly prophetic dream, and finally the ominous urging from Pylades that he choose the enmity of all men rather than the ill will of the gods. Thus, although Apollo has commanded Orestes to kill his mother, Aeschylus, our earliest tragedian, portrays Orestes as able and well nigh determined to disobey the command. Pylades' final advice reminds us that Orestes had the ability, and through a little advice of the opposite kind would easily have had the will, to disobey the command. Furthermore, even though this pressure upon Orestes to kill his mother is portrayed as a command from Apollo, we should not forget how obligatory blood-vengeance is in early societies and how unrelenting the group feeling is in such societies against any one who would shrink from this obligation. If it had not been alleged that a god had commanded Orestes to kill his mother, popular feeling of the twelfth, if not of the fifth, century B.C. would very likely have demanded even more vehemently that he kill her.

But what about Oedipus? you are perhaps saying. Well, on the basis of what play? The *Oedipus Tyrannus*? This is a most deceptive play, unless one considers it carefully. *The mere discovery* of what Oedipus had unwittingly done at least some ten years earlier is so vividly brought out and these deeds are so horrible and contrary to all that Oedipus had wanted to do that the reader easily feels that he has witnessed the doing of these deeds. Yet he has in fact witnessed *only* Oedipus' discovery of what he has already done. A more accurate title for this play would be *Oedipus Discovers His Plight.* For he comes on the scene at the beginning of the play, having committed years ago all the horrible acts associated with his name ever since, except his blinding of himself. Of course he has in this play no choice whatever which would help him not to kill his father and marry his mother; for he has already done both, at least four children ago. In this play he is free only to discover or not discover his plight.

But what about his opportunity for choice before he killed his father and married his mother, as he tells the story himself and as Creon and Antigone comment on it? He acknowledges and everywhere shows that he was temperamentally quick to become angry, to suspect, and to accuse. His tragedy began in Corinth, his foster home, when a youth taunted him with being a supposititious child. Oedipus left the party in a huff and paid, as he himself said later (*O.T.* 777-8), more attention to it than it deserved. Here, as the Greeks must have seen, was Oedipus' first chance to have avoided his later fate, but he muffed it because of his anger. Polybus and Merope, his reputed parents, satisfied him about this matter temporarily. But as report spread, Oedipus decided to consult Delphi about his parentage. When Apollo didn't answer his question but warned him that he was destined to slay his father and marry his mother, Oedipus decided not to return to Corinth. He set out for Thebes instead. On this journey, he met, without knowing who it was, his real father, Laius, on his way to

ask the oracle the answer to the Sphinx' riddle. The king's herald was in front to clear the way for him, and people were supposed to yield precedence of way to a king. When this herald and the retinue forced Oedipus from the road, Oedipus killed them all (as he thought). And again it was anger, as he himself says, which caused him to kill them. Here Oedipus had his second and most culpable chance to avoid the fate he was seeking to escape. But he muffed it again through anger. He continued on to Thebes, and all would have been well with him, at least as far as his mother was concerned, if he had not, of his own free will and intellectual pride apparently, decided to try to answer the Sphinx' riddle. This he did, and won thereby the throne of Thebes and the widowed queen *who went with the throne.* (It should never be forgotten that there is not one shred of evidence of any romance between Oedipus and Jocasta, or that Oedipus ever had any amorous 'mother-yearnings', as the term Oedipus complex implies.) Oedipus thus had, as the Greeks would surely have seen, at least three chances to avoid the fate he feared, but he made the wrong choice each time. Oedipus, Creon (*O.T.* 673-4; *O.C.* 835 ff.), and Antigone (*O.C.*, 1192-8) all say that it was anger (they don't say fate) that had been Oedipus' ruin. It was in a rage that Oedipus blinded himself. Sophocles refers to this fault in Oedipus 13 times in the *O.T.* and 7 times in the *O.C.* So when all the facts are considered, we see that Oedipus had had open to him at least three opportunities to avoid his fate. He made the wrong choice in each case, not through being forced to do so, but through anger or intellectual pride apparently. In the light of the pains Sophocles took to omit fate as the cause and to emphasize anger so extensively as the real cause of Oedipus' disasters, it seems that Sophocles meant to portray Oedipus' tragedy as stemming from a marked tragic flaw rather than from a fate Oedipus had no opportunity of avoiding. Moreover, the fact that Aristotle, whose purpose was to deal with the most important elements in Greek tragedy, nowhere mentioned fate as among its important factors seems to me additional evidence that the Greeks, while realizing fully that there were unchangeably fixed elements in every one's life, believed that in by far the greater part of life and living man is seldom, if ever, forced against his will to act in only one possible, predetermined way. Man lives and must act always or nearly always in the presence of choices, and must therefore accept some responsibility for how he uses his choices and conducts his life. This, as I see it, our tragic authors seem to have believed, and they predicated their tragedies on it.

These then are the four indispensables for understanding Athenian tragedy which I decided to bring before you—that we always remember (a) the small percentage of tragedies that have survived, (b) the Athenian demand that their poets be community teachers, (c) the role of oracles and prophecies in Greek tragedy, and (d) the role of fate. There are other indispensables, of course, but these seemed to me important enough and troublesome enough to merit our attention.

Alfred G. Engstrom is Professor of French in the University of North Carolina, where he obtained his A.B., A.M., and Ph.D. degrees. He has been on the faculty since 1936. Among his publications are articles on the French artistic short story, synaesthesia in literature, and the ironic and symbolic structure of Flaubert's *Madame Bovary*. He was one of the editors of *Romance Studies Presented to William Morton Dey* and is at present on the editorial committee of the University of North Carolina's *Studies in Comparative Literature*. The lecture printed here was delivered on February 23, 1954.

THE SYMBOL OF THE BIRD IN FLIGHT

By Alfred G. Engstrom

> "And for ages men had gazed upward as he was gazing at birds in flight."—James Joyce

I remember looking upward one day many years ago in late winter, when the early northern thaws were loosing the ice of the rivers and melting the snows. The skies were clearing and seemed very high overhead so that one had the illusion of extended vision. Far above the earth a dark, wavering wedge of great birds was flying—geese in migration near the winter's end. One could only half discern at that distance the beating of their wings. A sense of changing seasons made the birds a symbol of vast forces in motion toward the spring; and there was something of nostalgic strangeness, of mystery and alien places, something meaningful to the individual sensibility in the flight of these birds. Where had they come from? Where were they going? Long after the dark wedge had passed from sight an eerie sense of the flying birds remained.

It is in great part because of wings that the folklore of birds has so lasting a place in the traditions of every land, and that birds are related so intimately with the various good and evil forces that are thought to influence the patterns of human life. Birds play a natural role in the great scheme of things, but wings afford them a special character and give them enduring beauty and mystery.

From ancient times records bear witness to the interest and concern of men in the flight of birds. A flying bird may be a god, a soul, an omen, or a prefiguration or symbol of a myriad other aspects of man's life and his desiring; and here, as elsewhere, knowledge of the development of ancient and primitive legend and belief reveals the startling continuity in human feelings and apprehensions.

This evening I propose to consider the bird in flight as recorded in anthropology and folklore, in formal augury, and in that portion of literature, especially that of the West, with which I am familiar. In the two parts of my paper I shall try to show some of the meanings that have developed for the symbolic bird in flight—first, by considering the mysterious links established between bird flight and the forces of nature, prophecy, and the will of the gods; and second, by examining some of the more vivid or persistent flight symbols that have come down in imaginative literature. I hope in this way to make evident something of the strangeness and beauty that have gathered through the ages about the image of the flying bird, and to show how golden a nerve of sensibility links us and our poets, not only with the poets of the past, but with a great unwritten poetry of mankind.

I

There is a mystery in wings that relates the flying bird immediately with the natural and supernatural forces man sees or imagines at work in his universe. The sudden appearance or disappearance of birds is one of

the most startling phenomena of seasonal change; and the regular invasion of wings in spring and fall seems all the more mysterious since the migration takes place so often in the dark hours of nature's night.

Mankind has observed the mystery of bird migration for thousands of years without having a very clear knowledge of what it was observing. There is an account of a migrant flight of quail in Exodus (XVI.13) that may be dated at about 1445 B.C.—and another for the following year in Numbers (XI.31); but both occurrences are clearly understood as miracles especially provided by a tribal god. Eleven hundred years later Aristotle writes in surprising detail on bird migration, expressing the belief that in certain cases one species can change to another at the coming of the cold—a belief surviving among the ignorant in our time.

From the age of Aristotle birds were thought to hibernate, and recent discoveries concerning at least one species bear out this theory. But we may still smile at the belief of European peasants that the smaller migrants ride high in the air upon the serviceable backs of flying storks or cranes; and we are likely to be amused at the statement in an anonymous London treatise from the eighteenth century that migrant birds spend their winters on the moon. The latter theory was once boldly defended, with the argument that since horizontal migration of birds had not been observed by men, migration must of necessity be perpendicular and the moon the birds' logical destination, in accordance with the Copernican scheme of things. The ingenious champion of this theory allows his perpendicular migrants two months for the ascending moon-journey, three months for recuperation, and two months more for the return to earth.

Robert Burton, in *The Anatomy of Melancholy*, shows an erudite perplexity in trying to solve the mysterious behavior of what Izaak Walton will later call these "half-year birds":

> I would . . . if I could, observe what becomes of swallows, storks, cranes, cuckoos, nightingales, redstarts, and many other kind of singing birds, water-fowls, hawks, etc. Some of them are only seen in summer, some in winter, some are observed in the snow, and at no other times, each having their seasons. In winter not a bird is in Muscovy to be found, but at the spring in an instant the woods and hedges are full of them, saith Herbastein: how comes it to pass? Do they sleep in winter, like Gesner's Alpine mice; or do they lie hid (as Olaus affirms) "in the bottom of lakes and rivers . . . often so found by fishermen in Poland and Scandia, two together, mouth to mouth, wing to wing; and when the spring comes they revive again, or if they be brought into a stove, or to the fireside." Or do they follow the sun, as Peter Martyr . . . manifestly convicts, out of his own knowledge. . . . Or lie they hid in caves, rocks, and hollow trees, as most think, in deep tin-mines or sea-cliffs. . . ? I conclude of them all, for my part, as Munster doth of cranes and storks; whence they come, whither they go, *incompertum adhuc*, as yet we know not. We see them here, some in summer, some in winter; "their coming and going is sure in the night. . . ."

Certain birds are widely recognized as symbols of the changing seasons. Thus Ben Jonson borrows from Sappho a phrase still lovely after

all the centuries to refer to "the dear good angel of the spring, /The nightingale." More generally it is the swallow that has been thought by Europeans to be spring's harbinger. In the ancient world, an imitator of Anacreon has an ode to it, and the Rhodians are said to have greeted its arrival with a solemn song of welcome. It is "God's bird" in France and Germany, and among the Arabs the "Bird of Paradise," the only living thing that has access to the gates of Eden.

Mankind is always watching for the birds of spring; and in the autumn it anticipates their departure, as in the Yukon Delta where October is called "the month of flying away" because of the southward journey of the migrant birds. Sometimes a bird's wing can survive the years and bear witness to a season long gone by, when a poet like Alcman sings of the halcyon flying "fearless of heart . . . over the bloom of the wave, the Spring's own bird that is purple as the sea!"—or when a singer of ancient Ireland, whose name has not come down to us, writes at the coming of winter in his northern land:

> Cold has caught the wings of birds;
> Season of ice—these are my tidings.

In Mexico the spirit of summer warmth was once said to hibernate in the form of a bird; and the Mandans and Minitarees of North America used to believe that the migratory waterfowl were sent north in spring as representatives and symbols of a certain Old Woman Who Never Dies, the force behind the growing of the crops. Among savage and superstitious peoples the birds themselves are often thought to have powers over the elements, which sometimes assume their form. For the Bushmen the wind can appear in the guise of a bird. The Algonquins used to say that birds made the winds and waterspouts and that their spreading wings were the clouds. The Sioux believed that thunder was heard when the cloud-bird flapped his wings, and there are Negroes along the Maryland coast still persuaded that the cry of the killdeer summons the wind and that killing the bird will arouse a violent storm. For one who has felt the weird powers behind Coleridge's albatross in *The Ancient Mariner* these primitive intuitions may not seem remote. They are part of a larger pattern in man's attempt to come to terms with his physical universe.

It is perhaps quite natural that birds should be considered weather-prophets and that their flight should seem to have close affiliations with calm skies and wind and storm. Many of the supposed weather-signs from bird-flight are very old and have come through numerous and varied layers of tradition. They can often be recognized in still current popular beliefs. Thus Theocritus cites, as a sign of storm, birds fleeing from the sea, and as a sign of early or late winter the early or late flying of the migrant cranes. Cornelius Agrippa would prophecy storm or fair weather in turn from the swift or slow flight of these same birds, which had seemed to Aristotle "to come from the ends of the world." In our own country winter and spring are widely anticipated from the southern or northern direction of migrating ducks and geese, sea-birds flying toward the sea at an early hour mean fair weather, and high-flying buzzards or low-flying swallows are indicants of rain.

Just as man has linked the flight of birds with the mysterious powers

of the natural universe, so he has mingled bird form and bird flight with thought of his gods. Among the Greeks and Romans, the eagle of Zeus or Jupiter, the owl of Pallas, and the doves or sparrows of Aphrodite or Venus are as characteristic as the ravens of Odin in Germanic legend or the great Indian Garuda that carries the god Vishnu in the East. The Egyptian phoenix symbolizes the sun-god Horus. Huitzilopochtli, the hideous Aztec war-god and god of the sun, appears early in the form of the hummingbird, whose feathers were used thereafter for the adornment of his statues. In New Zealand a Maori god is a Promethean bird that stole fire from heaven. The mikados of Japan once claimed descent from a sun-goddess whose attribute was a bird. Even in the texts of the Christian religion the Holy Spirit appears as a descending dove (Matthew 3.16).

The gods themselves—and angels and demons—are thus often given a bird-like character by wings or other attributes. Among the Hebraic angels the Cherubim have four wings and the Seraphim six. Satan may appear in the guise of a bird. Many Greek and Latin deities have wings; and when Eros, the beautiful god of Love, is so represented, along with his companions, Himeros and Pothos (Desire and Longing), one feels the poetic sensibility behind the figures of the myth.

One of the gods most startling in his bird-like attributes is the ibis-headed Thoth, conceived among the ancient Egyptians as god of letters, invention, and wisdom. He is related to the Greek Hermes Psychopomp, who accompanied souls to the underworld; and he is the ancestor of the mysterious Hermes Trismegistus ("Thrice-Powerful Hermes"), so dear to the alchemists. Maspero cites from *The Adventure of Satni-Khamois with the Mummies* an old priest's description of the unearthly powers of the dread *Book of Thoth,* written by this mysterious bird-headed deity:

> I will cause thee to go to a place where the book is that Thoth wrote with his hand himself, when he came here below with the gods. The two formulae that are written there, if thou recitest the first thou shalt charm the heavens, the earth, the world of the night, the mountains, the waters; thou shalt understand that which the birds of heaven and the reptiles say, as many as they are; thou shalt see the fish of the deep, for a divine power will rest on the water above them. If thou readest the second formula, even after thou art in the tomb, thou shalt resume the form that thou hadst on earth; also thou shalt see the sun rising in the heavens, with his cycle of gods, and the moon in the form she has when she appears.

Thoth's weird knowledge of the heavens and the earth, of the night and death, and of the sun and the gods prefigures in a way the supernatural qualities that the human imagination has granted to birds in many ages and in many lands.

In the same way that man has imagined relations between birds and the larger physical elements of nature and the mighty gods, he has imagined their relations with the very particular forces and events concerned in his own destiny. Cornelius Agrippa discusses this in an early Renaissance book on natural magic:

> Auspicia and Auguria . . . are verified by the light of natural instinct, as if from this some lights of divination may descend

> upon four-footed beasts, those winged and other creatures, by which they are able to presage to us of the events of things. . . . Now this instinct of Nature, as saith William of Paris, is more sublime than all human apprehension, and very near, and most like to prophecy. By this instinct there is a certain wonderful light of divination in some animals naturally. . . . By the like instinct vultures foresee future slaughters in battles, and gather together into places where they shall be, as if they foresaw the flesh of dead carcasses.

A strange parallel may be cited from the English *Notes and Queries* of April 20, 1861, where a correspondent quotes the statement of a friend's servant at Bangalore that he knew the cholera was over because the kites were back. The writer found only one native who had observed this strange phenomenon—"but he maintained that it was a well-ascertained fact, and he imputed the prescience of the birds to their power of delving into the secrets of futurity. This power, he said, was common to them and to lizards and had been acknowledged by all sects in all ages." Perhaps a shadowy sense of such ancient beliefs can move even in a sophisticated mind at the etymology that appears in some texts of Vergil for the mouth of the underworld—Avernus, "the birdless place."

Numberless popular superstitions still show man's fear of bird flight as foreboding death and human disaster. In certain minds there is mortal terror at a bird's flying through a house, or alighting on the bed of a sick person, or pecking at a window while flapping its wings against the panes Readers of the *Aeneid* may recall that in the Twelfth Book, immediately before the death of Turnus, Jupiter sends one of the Furies in the form of a bird of night to fly back and forth before the doomed warrior's face and beat his shield with its wings. His goddess sister, Juturna, sees then that Turnus is lost: "Can I face such a portent? Now, now I quit the field. Affright not my fluttering soul, ye ill-boding birds! I know your beating wings and their dreadful sound. . . . " And, veiling her head with a gray mantle, the fountain goddess plunges sorrowfully into the deep waters, leaving Turnus to his fate—the "black whirlwind" of Aeneas' spear and the bite of his sword.

Many centuries later, Dante, the greatest poet of the Middle Ages, tells in *La vita nuova* (XXIII) how it occurred to him when he was ill that Beatrice must one day die: " . . . and I thought I beheld the sun grow dark, so that the stars showed themselves of a hue that made me judge they were weeping, and I thought that birds on the wing fell dead and that there were great earthquakes."

In England seamen and miners sometimes fear the call of "the Seven Whistlers," mysterious birds of uncertain identity (probably curlews or plovers). They appear as early as *The Faerie Queene*, where a stanza containing the Whistler is rich in ominous birds (II. xii. 36):

> Euen all the nation of vnfortunate
> And fatall birds about them flocked were,
> Such as by nature men abhorre and hate,
> The ill-faste Owle, deaths dreadfull messengere,
> The hoars Night-raven, trump of dolefull drere,
> The lether-winged Bat, dayes enimy,
> The ruefull Strich, still waiting on the bere,

The Whistler shrill, that who so heares, doth dy,
The hellish Harpies, prophets of sad destiny.

The Whistler recurs in a grim passage of Webster's *Duchess of Malfi* just before the murder of the heroine (IV. ii. 180-183):

Hearke, now every thing is still—
The Schritch-Owle, and the whistler shrill,
Call upon our Dame, aloud,
And bid her quickly don her shrowd.

Scholars have pursued the Whistler over fascinating routes—down dark skies with the Wild Huntsman of European folklore, and in the chase of Gabriel's Hounds after unsaved spirits in the night. The Seven Whistlers are sometimes thought to be the lonely souls that took part in the Crucifixion of Our Lord, or the souls of unbaptized children condemned to wander the skies in the form of birds. They would seem closely related to the *Cwn Wybr* or *Cwn Annwn* (Dogs of the Sky, or Dogs of Hell or the Abyss) described in Waring's *Recollections of Edward Williams* as "heard in the gloom of night over some dreary mountain or moorland district, appalling . . . the lonely dwellers in those remote places by baying or yelling in the most horrid chorus." Waring's account tells of a certain Mr. William Weston Young, then resident at Newton Nottage in Glamorgan, whose experience with the Dogs of the Sky during nocturnal travels affords a vivid and plausible explanation of weird folk-belief:

> He suspected these *Cwn Wybr* to be really some gregarious birds flying by night, and at length perfectly satisfied his own mind on the subject. In the course of his business as a land surveyor, he was on a pony one intensely dark night, crossing a desolate tract of mountains, when he heard the most extraordinary yelping and clamorous noises over his head, in various keys, not unlike the cries of hounds and huntsmen in full chase. He looked upwards, but the darkness was impenetrable. His quick ear, however, soon caught a rushing sound, which he knew was the *burr* of pinions against the air, and presently a large flight of curlews descended so near him, that some of their wings brushed his hat as they swept obliquely down to the heather. They had no sooner settled on their feet than the *Cwn Wybr* ceased to be heard. He then recollected having heard the same peculiar nocturnal cry from the curlew on former occasions, but had never before encountered such an overpowering orchestra of these wild serenaders upon the wing. Mr. Young admitted that nothing could be more natural than the terror of a superstitious or uninformed person at the strange aerial cries he had listened to that night, amidst mountain echoes, and in so desolate a spot.

English miners believed that the call of the Seven Whistlers in 1862 foretold a terrible explosion at Hartley Colliery; and a few years later bird voices, coming through a storm, were identified as those of the Seven Whistlers once more foretelling disaster.

A similar belief describes "the White Birds of Salisbury Plain" that are supposed to appear before the death of any Bishop of Salisbury, "dazzling white, with an immense wing stretch, and rather like albatrosses in appearance," according to one bishop's daughter who described them in 1885—or, as they were depicted on another occasion a quarter of a century later, "with still wings which did not strike the air."

In the play *Deirdre* by "A. E." there is a parallel to the White Birds of Salisbury Plain. The heroine cries: ". . . Oh, see! what bright birds are around me with dazzling wings! Can you not hear their singing? Oh, bright birds, make music for ever around my love and me!" But the Druidess Lavarcam, who loves Deirdre, answers in fear: "They are the Birds of Angus. Their singing brings love and death." Later Deirdre tries to point out the ominous birds to her lover Naisi: "Do you not see them? The bright birds which sang at our flight! Look, how they wheel about us as they sing! . . . . And their plumage, Naisi! It is all dabbled with crimson; and they shake a ruddy dew from their wings upon us!" But Naisi cannot see: "Poor frightened one, there are no birds!" The Birds of Angus show again "all fiery and crimson," and it is not in the nature of such poetry for the omens to be wrong.

From ancient times birds have been considered immediate messengers of divine will. In the earliest literature of the West, prophetic conclusions are often drawn from their flight, most commonly from "the high-flying eagle," the bird of Zeus. For Greeks and Trojans it was bad luck indeed to see an eagle's great wings coming in from the left. In Book XII of the *Iliad* when the Trojans under Polydamas and Hector are seeking to break through the Greek wall to burn the enemy ships, they suddenly hesitate:

> For a bird had come upon them, as they were eager to cross over, an eagle of lofty flight, skirting the host on the left, and in its talons it bore a blood-red, monstrous snake, still alive and struggling . . . and [the eagle] let it fall in the midst of the throng, and himself with a loud cry sped away down the blasts of the wind.

Polydamas' warning that this is an omen to fear is answered by great Hector in one of the bravest passages in the *Iliad*:

> . . . you bid us to be obedient to birds long of wing, that I regard not, nor take thought of, whether they fare to the right, toward the Dawn and the sun, or to the left toward murky darkness. Nay, for us, let us be obedient to the counsel of great Zeus, that is king over all mortals and immortals. One omen is best, to fight for one's country.

But the omen is from the left, and the *Iliad* closes with the burning of Hector's body on a funeral pyre.

With the Romans a formal augury is said to have flourished from earliest times, when Romulus and Remus practiced it and Romulus founded Rome in obedience to the auspices. In the Roman capital, augury seems to have developed under Etruscan influence. It was more formally organized and more traditionally related to the state than it had ever been with the Greeks, and there was much variance from the details of Greek practice. The favorable side for the Romans was usually the left, since in theory (if not always in fact) they faced south for their auguries, with the fortunate east (Hector's "Dawn and the sun") to the left—and to the right the unlucky west, "toward murky darkness." The Greeks had faced north, so that for them the lucky east was on the right.

For the Romans, augural birds were supposedly Jove's messengers and gave warnings for the future—not telling what was to be, but only advising as to the wisdom or folly of proposed undertakings. They were

limited to responses of yes or no and were thus well adapted to practical matters of state. The augurs were elected for life. They bore as chief mark of their office the *lituus*, or augur's staff of curved wood, with which they marked off the *templum* from which the auspices were taken. Within their augur's tent they watched for various signs from left or right, the lucky and unlucky sides. Wild birds that gave omens were divided into two classes—the *oscines* and the *alites*, whose auguries came respectively from voice and from flight, with some birds falling into both classes. Among the *alites*, the flying eagle (*aquila*), the vulture (*vultur*), and the *avis sanqualis* (probably the osprey) were of major importance, though other birds were also observed, and there was a very complicated system of taking and interpreting observations, with an equally elaborate organization of the augural objects to be observed. The person taking the auspices watched for specified signs within a specified time. The final moment or *tempestus* was the climax of the whole procedure. We shall see hereafter how this ritual is adapted to the literature of our own day.

In the early sixteenth century Cornelius Agrippa's *Natural Magic* cites from Michael Scotus twelve kinds of auguries from birds, dependent mostly on direction of flight and position with relation to the person concerned. For Cornelius Agrippa, various birds had particular and varied meanings for augury:

> For in all things the Oracles of things to come are hid, but those are chiefest which omenal birds shall foretell. These are those which the poets relate were turned from men into birds. Therefore, what the daw declares, hearken unto and mark, observing her setting . . . and her manner of flying, whether on the right hand or left; whether clamorous or silent; whether she waits for the approach of him that passeth by, or flies from him, and which way he goes. All these things must be diligently observed. . . . Thou shalt, also, as carefully observe crows, which are as significant as daws, yea, and in greater matters. . . . Then thou shalt take heed to swans, who foreknow the secrets of the waters. . . .

In the *Natural Magic*, eagles "portend advancement and victory . . . by blood," vultures (as we have seen earlier) "foretell the places of slaughter," the heron is "an augury of hard things," and cranes "give us notice of the treachery of enemies."

All down the years the practice of augury from bird flight has left its mark in our traditions and our literature. It is of common occurrence in the *Iliad* and the *Odyssey*; we find it in Vergil's *Aeneid*, in the Spanish epic of *The Cid*, in the French Renart poems, in Shakespeare—and it persists as an imaginative force today. In *The Portrait of the Artist as a Young Man*, Joyce has his hero, Stephen Dedalus, stand on the steps of the National Library in Dublin and decide whether to break with the traditions of his youth and leave his home in Ireland. Joyce employs in the passage some of the formal terms of Latin augury and links his thoughts with very rich associations from the ancient past. Since the incident seems to mirror his own decision to leave Ireland, the moment is eloquently symbolic for a time only a little before our own. It should serve well as conclusion to the first part of our examination into the symbol of the bird in flight.

> What birds were they? . . . .
>
> He watched their flight; bird after bird: a dark flash, a swerve, a flutter of wings. . . . They were flying high and low . . . ever flying from left to right, circling about a temple of air. . . .
>
> Why was he gazing upwards from the steps of the porch, hearing their shrill twofold cry, watching their flight? For an augury of good or evil? A phrase of Cornelius Agrippa flew through his mind and . . . shapeless thoughts from Swedenborg on the correspondence of birds to things of the intellect. . . .
>
> And for ages men had gazed upward as he was gazing at birds in flight. The colonnade above him made him think vaguely of an ancient temple and the ashplant on which he leaned wearily of the curved stick of an augur. A sense of fear of the unknown moved in the heart of his weariness, a fear of symbols and portents, of the hawklike man whose name he bore soaring out of his captivity on osier woven wings, of Thoth, the god of writers, writing with a reed upon a tablet and bearing on his narrow ibis head the cusped moon.

Then the birds return through the fading air.

> What birds were they? He thought that they must be swallows who had come back from the south. Then he was to go away? for they were birds ever going and coming, building ever an unlasting home under the eaves of men's houses and ever leaving the homes they had built to wander . . . and he felt that the augury he had sought in the wheeling darting birds and in the pale space of sky above him had come forth from his heart like a bird from a turret quietly and swiftly.

II

In *The Portrait of the Artist*, Joyce employs the flying bird in part as a traditional symbol from augury—but it is something more; for the augury is not drawn from the bird alone, as in the passages cited from Homer and Vergil. Joyce tells us that what Stephen had sought came swiftly and quietly "like a bird from a turret"—but it had come from within his own sensibility, and it is clear that Stephen has for the moment partly identified himself with the flying birds.

The word *empathy* has been applied in our time to signify this particular relation between man's consciousness and an object of his intuitive or imaginative attention. It is more than sympathy, or mere friendly community of feeling. In empathy a sensitive mind partakes of the nature or activity of another being or object with such projection of experience that for the moment it more or less becomes something other than its normal self. St. Francis exemplifies it in his famous *Song of the Creatures* when he calls the sun and the moon and the four elements and physical death his brothers and sisters. Keats knew it when he wrote that "if a Sparrow come before my Window I take part in its existince [*sic*] and pick about the Gravel"—or when, in one of his most beautiful letters, he seems almost to echo the words of St. Francis:

> . . . there is a Sublimity to welcome me home. The roaring of the wind is my wife and the Stars through the window pane are my Children. . . . I feel more and more every day, as my imagination strengthens, that I do not live in this world alone but in a thousand worlds. . . .

This phenomenon lies close to the heart of poetry and mysticism, and has had its role in the formation of numerous primitive beliefs and many established rituals.

In her study of *Archetypal Patterns in Poetry*, Maud Bodkin remarks that "the cry of the singer in the negro spiritual, 'Sometimes I feel like an eagle in the air,' evokes probably a response from every hearer. . . . since the name of the eagle has become a symbol of the cumulative result of our empathic perception of bird-flight—the high-soaring flight that braves the sun's glare above and brings vision of the earth spread out below.' Similarly, in actual experience the sudden sight of a bird flying, under certain circumstances of mood and physical surroundings, can draw human minds into the bird's orbit and into something of its living motion and relations in the air. The creative imagination combines such an experience with the most varied elements, so that the same general symbol can be employed in very different ways, often in conjunction with such archetypal elements of sensation as warmth, cold, light, darkness, calm, or tempest.

When Vergil describes Aeneas' weird descent to the Underworld (*Aeneid*, VI) he shows us the ghosts of the dead awaiting Charon's boat. They stretch out their hands "in yearning for the further shore," and Vergil tells us that they are numerous as fallen autumn leaves in a forest or as migrant birds when the cold season drives them to warmer climes. The image is effective, especially if one recalls the compulsion that acts upon falling leaves or migrant birds in the great continuum of natural law—but Vergil's symbol is richer than this. The spirits of the dead are like the leaves in that they, too, have fallen away from what is alive; and, like migrant birds, they have fled at the coming of the cold—the bitter cold of death.

In the *Inferno* (V. 40-49) Dante employs two bird images to describe the punishment of the carnal sinners. Those who in life were blown by the dark winds of lust are blown after death through darkness by the winds of a hellish storm that never gives them rest.

> And, as starlings are borne by their wings
> in the cold season, in a broad and dense flock,
> so that blast carries the evil spirits.
> Here, there, up, and down, it blows them;
> no hope ever comforts them
> of rest or even of less pain.
> And as cranes go chanting their lays,
> making a long line of themselves in the air,
> so I saw coming, uttering laments,
> shades borne by that strife of winds.

Dante knew the elements of his similes and employed them with the candor of immediacy that is one of the marks of a great poet. The starlings, "in a broad and dense flock," blown by a wintry wind, are marvelously adapted to Dante's purpose, as any close observer will know if he has imagined the experience of this flying bird in such weather as the poet describes. Dante's genius is even more apparent when he reinforces the simile of the starlings with that of the cranes to introduce the melancholy sound of voices in lamentation and to suggest long visual images against the dark sky. There may be even a further, ironic meaning in this symbol, for it seems probable that Dante is comparing the damned souls to a flock of cranes in fall mi-

gration. If this is so, the great birds, for all their seasonal restlessness, have a desirable goal in warmer lands. The souls of the lustful are not going anywhere.

Scholars have shown that bird-flight is one of the richest sources for Shakespearian imagery. Mr. G. Wilson Knight, in *The Shakespearian Tempest*, cites especially from Shakespeare's verse such "towering" birds as the falcon and the eagle, symbolizing pride and noble position, and the lark, the bird of dawn, singing "at heaven's gate"—and he elaborates with reference to bird-flight his belief that "Shakespeare's finest verses are presented in terms of swiftness, fire, and music":

> So, in Shakespeare's imagery of these excelling qualities in man, his aspiring pride, his soldiership, his love, his athletic grace, beauty of form, all that is 'air and fire' rather than sluggish 'earth and water', we pass from birds through metaphysical ideas of swift and winged intuitions, to more vivid and concrete embodiments in terms of Cupid, Mercury, and the angels. In *The Tempest*, this facet of the Shakespearian imagination clearly receives a final impress in Ariel. Ariel, too, is a spirit of air and fire, of fire and music; yet able to penetrate the earth itself and dive within the sea. He is a spirit of beauty and active grace. He is aptly set beside Caliban. In Ariel we find the consummation of this Shakespearian intuition of winged beauty, air, fire, and music.

Flying birds fill the skies of poetry and myth. Sometimes they symbolize the mysteries of religion. They talk with Solomon and Elijah, with the Druids, and with Mahomet, and they help the saints—especially those of the Celts, whose ancient tribes are said to have been "all guided in their wanderings by the flight of birds." Just as two doves flew from Thebes in Egypt, one to Dodona in Epirus, the other to the temple of Jupiter Ammon in Libya to command the establishment of oracles for the god, so in Christian times it is said that doves dropped grains of wheat to spell out "Ave Maria" before the startled eyes of Peter the Hermit on the very spot where he was to build a monastery at the Virgin's command.

A beautiful folk-tale has the birds remain suspended in the air at the moment of the Saviour's birth; and poets have seen a symbol of the Cross itself in the image of the flying bird. According to Saint Ephraim

> . . . if the little bird drew in its wings and refused to use
> the silly mystery of the Cross, the air would then refuse her,
> and not bear her up; but her wings praise the Rood.

John Donne, in *The Crosse*, draws the same symbol in the seventeenth century:

> Looke downe, thou spiest out Crosses in small things;
> Looke up, thou seest birds rais'd on crossed wings.

And Paul Claudel, in the *Prologue* of *The Annunciation to Mary*, has Violaine refer to a lark as "the little vehement cross, like the seraphim." Finally, lovers of St. Francis will recall the scene from *The Little Flowers* at the end of the sermon to the birds (Chapter XVI):

> At the last, having ended the preaching, S. Francis made over them the sign of the cross, and gave them leave to go away; and thereby all the birds with wondrous singing rose up in the air; and then, in the fashion of the cross that S. Francis had made over them,

> divided themselves into four parts; and the one part flew toward the East, and the other toward the West, and the other toward the South, and the fourth toward the North, and each flight went on its way singing wondrous songs; signifying thereby that even as S. Francis, the standard-bearer of the Cross of Christ, had preached unto them, and made over them the sign of the cross, after the pattern of which they separated themselves unto the four parts of the world: even so the preaching of the Cross of Christ, renewed by S. Francis, would be carried by him and the brothers throughout all the world; the which brothers, after the fashion of the birds, possessing nothing of their own in this world, commit their lives wholly unto the providence of God.

Modern and contemporary poetry offers unusually rich and varied meanings for the symbolic bird in flight. A few examples will have to suffice. They come easily, and the problem is primarily one of selection from the brilliant flock at hand. Coleridge's albatross keeps its fascination, flying and falling in a poem of haunting music, and related, as we have seen earlier, to a primitive sense of the supernatural. The skylark of Shelley has something of the ethereal quality of bird flight in the unusual synaesthetic metaphor of high sound disappearing in the sky like the contracting light of the morning star at dawn. In *May Night*, Alfred de Musset draws with sombre half-lights the lonely flight of the pelican, an age-old symbol of charity and self-sacrifice, which he links with the sufferings and creations of the poet. Leconte de Lisle, greatest of the French Parnassians, in *The Sleep of the Condor*, offers a strange symbol of the super-human world as the great bird rises in the night above the cold snows of the Andes, beyond the wind and the dark earth, and sleeps with vast wings spread in the icy air. A flightless swan in a Parisian gutter becomes for Baudelaire a symbol of exile and longing that puts him in mind of Andromache lonely near Hector's empty tomb in a strange land. Sometimes the flight of a bird is a symbol of brute beauty, as in Gerard Manley Hopkins' *The Windhover*, where the "billion times told lovelier" fire of the Christ effects the poem's final alchemy. The bird can be wounded and fall in the mire as a symbol of broken dreams for Emma Bovary. It disappears into the blue of the Ideal in Mallarmé's *L'Azur* to heighten the irony of the poet's frustration before the blind-alley of his art. For Allen Tate (*The Eagle*) "the white eagle" is the mind. Faulkner, perhaps wittingly, employs in *Mosquitoes* a very ancient sun-symbol to describe the sunlight "slanting westward like a rushing of unheard golden wings across the sky." And Auden writes on poetic imagery and human need in terms of swift bird-flight:

> And all emotions to expression came,
> Recovering the archaic imagery:
> The longing for assurance takes the form
> Of a hawk's vertical stooping from the sky. . . .

Sometimes the flying bird can give an atmosphere of indefinable beauty to a poem, as when Hart Crane's masterpiece, *The Bridge*, opens to the dipping flight of gulls:

> How many dawns, chill from her rippling rest
> The seagull's wings shall dip and pivot him,
> Shedding white rings of tumult. . . .

At the end of *Finnegans Wake*, just before the "commodius vicus of recirculation" begins again—"Whish! A gull. Gulls. Far calls. Coming, far!" And the birds lend a further mystery to the end and the rebirth of "Finn, again!"

In the concluding pages of this paper we shall be concerned with a few recurrent meanings of the symbolic bird in flight that seem most memorably to reflect constant elements in human experience—man's situation in a mysterious universe, his regrets and vague longings, his clearer aspirations, his death and the problem of his soul.

The sadness of the human situation in a universe rimmed with darkness has provided vivid symbolism for the bird in flight. Marcus Aurelius employed it long ago at the heart of a statement in his *Meditations* on the nature of human life:

> Flux and change are forever renewing the universe; just as the unbroken course of time makes the infinity of ages ever young. In this stream, then, wherein there is no abiding, what is there among the multitude of things that go swimming past, on which a man shall set his heart? It is but as if a child should fall in love with the sparrow flitting over his head; and ere his love be well begun, the bird is out of sight.

Even more vivid and far more poetically conceived is the Venerable Bede's Latin passage on the sparrow in the mead-hall. Here the simile on man's situation is developed by one of King Edwin's advisers, who urges that the new doctrine of the Christians may bring more certainty than is found in the Pagan view of the universe:

> "The present life of man, O king, seems to me, in comparison of that time which is unknown to us, like the swift flight of a sparrow through the room wherein you sit at supper in winter, with your commanders and ministers, and a good fire in the midst, whilst the storms of rain and snow prevail abroad; the sparrow, I say, flying in at one door, and immediately out at another, whilst he is within, is safe from the wintry storm; but after a short space of fair weather, he immediately vanishes out of your sight, into the dark winter from which he had emerged. So this life of man appears for a short space, but of what went before, or what is to follow, we are utterly ignorant."

There is perhaps no other image in our literature in which quick, bright life and warmth have been framed with such marvelous irony in vast cold and night and storm to reveal the starkness of the human situation when man is not sure of his God.

A dying echo from Bede seems to be heard in E. E. Cummings' *Eimi*: "Twilight—a wet rolling land of gentle & infinite darkness . . . a little silhouette with a lantern, himself dissolved in universal . . . a bird reading the air . . . (what spirits go & come? curiously into Whom are we all unpossibly melting?)."

Many centuries earlier, to symbolize all lovely things that die, in a poem of unusual artifice the Roman poet Catullus had used a small bird passing along dark ways to devouring death. One can hear the pitiful wing-beats in the words:

> Qui nunc it per iter tenebricosum. . . .
> (Which now goes along the shadowy way)

Although Catullus turns his poem back to half-trivial artifice at the end, mankind over all the years has remembered with a sense of terrible kinship the image of a little bird fluttering downward into night.

Maeterlinck observes in one of his essays in *The Treasure of the Humble* that "every man has noble thoughts that pass like great white birds over his heart." The flight of birds, especially of those that fly high and far in a great sky, seems often to symbolize escape from humdrum cares, or the attainment of freedom or peace, or renewal of lost purity. For Freud, a woman's dreams of flight may sometimes signify longing. Jung sees birds as "thoughts and flights of mind" that represent fantasies or intuitive ideas; and he interprets various winged symbols in alchemy as depicting "in the last analysis . . . the state of affairs that we call the self, in its rôle of transcending consciousness."

One may recall the words of the Psalmist (Psalms 54.7): "Who will give me wings like a dove, and I will be at rest?" In Chateaubriand's *René*, the unhappy hero, at a loss before the tedium of his existence, identifies his vague longings and desire for death with the flight of migrant birds; and Flaubert's Madame Bovary, disillusioned and suffering from a sense of moral degradation, longs for a bird-flight to purity: "Escaping like a bird, she would have wished to go somewhere very far away and grow young again in immaculate space." Most men and women will probably respond to the cry in Psalms (11.1): "How say ye to my soul, Flee as a bird to your mountain?" But they may understand it in very different ways. For the mountain may be some rich communion with the inner life, or it may be the mystic's solitude, or it may be death.

The soul itself is often thought to be a bird that can pass from the living body under various circumstances. Frazer cites the belief of the Brazilian Bororos that the soul journeys in dreams, and he describes a Melanesian wizard on Leper's Island who was thought to have sent his soul from his mouth in bird form to obtain information from a ship that had sailed away. This would seem to be the edges of the crude ore from which the Platonic philosophers and the mystics draw their gold.

In Plato's *Phaedrus*, when Socrates and his companion are talking on the banks of the Ilissus, the philosopher's discussion turns upon the wing of the soul:

> Tho wing is intended to soar aloft and carry that which gravitates downwards into the upper region, which is the dwelling of the gods; and this is that element of the body which is most akin to the divine. . . .
>
> And . . . the mind of the philosopher alone has wings; and this is just, for he is always, according to the measure of his abilities, clinging in recollection to those things in which God abides, and in beholding which He is what he is. . . .
>
> Thus far I have been speaking of the . . . kind of madness, which is imputed to him who, when he sees the beauty of earth, is transported with the recollection of the true beauty; he would like to fly away, but he can not; he is like a bird fluttering and looking upward and careless of the world below; and he is therefore esteemed mad. And I have shown that this is of all inspirations the noblest and best . . . and that he who has part or lot in this madness is called a lover of the beautiful. . . .

> For those who have once begun the heavenward pilgrimage may not go down again to darkness and the journey beneath the earth, but they live in light always. . . .

Similarly, when St. Gregory the Great writes in his *Homilies on Ezechiel* of the mind's soaring in contemplation, it is clearly a beautiful bird metaphor that animates his thought:

> There is in contemplation a great effort of the mind, when it raises itself up to heavenly things, when it fixes its attention on spiritual things, when it tries to pass over all that is outwardly seen, when it narrows that it may be enlarged. And sometimes indeed it prevails and soars above the resisting darkness of its blindness, so that it attains to somewhat of the unencompassed Light by stealth and scantily; but for all that, to itself straightway beaten back it returns, and out of that light into which panting it had passed, into the darkness of its blindness sighing it returns.

Yet none of the mystics has surpassed the final phrase from the *Enneads* of Plotinus that describes the mind's union with God as "a flight of the alone to the Alone."

Among the mystical poets, Richard Crashaw writes in his poem *To the Name above every Name, the Name of Jesus*:

> Awake, My Glory. Soul. . . .
> . . .
> Awake and sing
> And be All Wing.
> . . .
> Goe, Soul, out of thy Self, and seek for More.

In darker vein, Henry Vaughan includes lines in *The Search* on "Despair of wings," recalling T. S. Eliot's phrase "wings . . . no longer wings to fly." And Walt Whitman uses the symbol of flight in a poem of quiet ecstasy called *A Clear Midnight*:

> This is thy hour O Soul, thy free flight into the wordless,
> Away from books, away from art, the day erased, the lesson done,
> Thee fully forth emerging, silent, gazing, pondering the themes thou lovest best,
> Night, sleep, death and the stars.

Finally we come to the imagery for death itself. For thousands of years the human imagination has conceived of the soul as taking flight, like a bird, in its journey to another life. This image can be traced in primitive belief and ancient ritual and it is found in poetry from early Egyptian times to our own day. It provides the most arresting of all symbolic meanings for the bird in flight.

The flight of the soul is described in the so-called Pyramid Texts preserved in five Egyptian pyramids dating from about 2400 B. C. to the end of the Old Kingdom. The texts contain very ancient formulae on the destiny of the blessed dead, especially of the dead who once were kings. They afford strangely memorable phrases on the skyward journey of the soul:

> He that flieth flieth! He flieth away from you, ye men. He is no longer on earth, he is in the sky. . . . He rusheth at the sky as a heron, he hath kissed the sky as a hawk. . . .

Then, after the dead has flown, birdlike, far from the earth:

He is this that ascendeth, ascendeth, is hidden, is hidden. . . .

The ancient Greeks imagined the soul variously as rising heavenward once it was freed from the body by the fire of the funeral pyre, or going under the earth guided by Hermes Psychopomp, or flying in bird form westward to the Fortunate Islands. These concepts naturally affected the language and imagery of the Greek and Latin poets. Thus, in *Œdipus the King*, Sophocles describes the dead as going like birds to the shore of the western god; in Euripides' *Hippolytus*, Theseus laments the death of Phaedra, saying that she has vanished from his hand like a bird in one headlong leap to the underworld; and at the end of Book Four of the *Aeneid*, Vergil, more delicately, tells of Juno's sending safron-winged Iris to free the struggling soul of Dido from its body, so that finally "all the warmth ebbed away, and life passed off into the winds."

Bird flight played its part more literally in the ceremonies observed for the *consecratio* or apotheosis of Roman emperors. Herodian, an historian of the third century after Christ, describes for us the end of the ritual honors, once the four-storeyed funeral pyre has been set aflame and is burning:

> . . . from the highest and smallest storey, as from a pinnacle, an eagle is let loose, to mount into the sky as the fire ascends, which is believed by the Romans to carry the soul of the emperor from earth to heaven, and from that time he is worshipped with the other gods.

The Emperor Titus, on his triumphal arch, is thus represented as being carried aloft on an eagle; and many surviving medals struck at the time of a *consecratio* bear the likeness of an altar with fire on it and Jove's bird ascending into the skies.

In the *Greek Anthology* there are references to the flight of the soul in death—among them, Plato's to Olympus, Amphilocus' to the place of the blest, and the soul of Gregory of Nazianza's father to God. Souls of saintly Christians are often cited as passing miraculously heavenward from their bodies in the form of white doves; and St. Anthony of Padua is supposed to have seen a Franciscan's soul flit as a white bird out of Purgatory itself. On the darker side, Gustave Cohen cites a German Passion play in which a devil comes out of the dying Judas' mouth in the form of a bird, black in color, that was held by its feet in the actor's lips until it was released.

The link between ancient and primitive rituals and beliefs and the poetic imagination is peculiarly evident in this aspect of the flight of the soul. In the "Chapter of Coming Forth by Day in the Underworld," in the Egyptian *Book of the Dead*, there is an apostrophe to two hawks "who . . . guide the bier to the hidden place. . . . " Among savage tribes it is a common belief that birds convey the souls into the other world. Some West African peoples even bind a living bird to the body of the dead and then sacrifice it so that it can carry the soul away. South Sea Islanders fashion coffins for their dead in the shape of the bird that is to furnish passage. Most remarkable, perhaps, is Tempon-Teloris, the Ship of the Dead among the Dayaks of Borneo, an unearthly vessel, which

carries the souls in search of the hereafter. It is generally represented in the shape of a strange bird, the rhinoceros hornbill. Piloted by Tempon-Telon, the Ship of the Dead carries the soul through the fire-sea to the shores of the blest.

The flight of the soul in death is an imaginative concept so widely held as to transcend time and place in the records of human sensibility. It is used metaphorically by Shelley in *Adonais* to describe the death of Keats:

> He has outsoared the shadow of our night. . . .

It is brilliantly employed in *Altazor* (High-Hawk), the masterpiece of the twentieth-century Chilean poet, Vincente Huidobro. And in our own country it has been adapted perhaps most imaginatively by Ernest Hemingway at the end of *The Snows of Kilimanjaro.*

The central character in Hemingway's story is a writer dying from gangrene in a remote part of Africa near snow-capped Kilimanjaro, the highest summit of what may have been Ptolemy's Mountains of the Moon. The dying man, half delirious, is awaiting a plane to take him back to civilization for treatment. It seems to him that they finally set out, and the flight of the soul in death is described in terms of the imagined flight of the plane into the death-cold of Kilimanjaro's snows. They seemed to be flying at first over familiar territory. . . .

> And then instead of going on to Arusha they turned left . . . and looking down he saw a pink sifting cloud, moving over the ground, and in the air, like the first snow in a blizzard, that comes from nowhere, and he knew the locusts were coming up from the South. Then they began to climb and they were going to the East it seemed and then it darkened and they were in a storm, and the rain so thick it seemed like flying through a waterfall, and then they were out . . . and there, ahead, all he could see, as wide as all the world, great, high, and unbelievably white in the sun, was the square top of Kilimanjaro. And then he knew that there was where he was going.

The flight of the plane into the snows of Kilimanjaro may well recall the death-flight in ancient Egypt, or the apotheosis of Roman emperors, or Plato's flight to Olympus, or Keats outsoaring night, or even the journey of Tempon-Teloris, the strange Ship of the Dead in Borneo. For it is all one in the long record of mankind. The bird in flight is still a symbol for a final mystery.

* * * * * * *

The flying bird belongs among the archetypal symbols that are so quickly grasped and so deeply woven into folk-belief and primitive and ancient ritual and the poetic imagination. The symbol of bird flight is like the symbols of the storm and the day and the night and the mountains and the sea, meaningful in numerous ways that most men know; and, as we have seen, it combines with other symbols—primordial, ancient, or modern—to form the most varied patterns of sensibility and the most striking of metaphors for representing man's situation in the universe, or the strange, inner complexity of his being.

I should like to leave with you one final image of the bird in flight. It occurs at the end of Robinson's *Tristram* and represents what is in the mind of Isolt of the White Hands as she looks seaward after her

husband's death. It is not Tristram's soul that appears moving over the waters; and yet the loneliness of Isolt, and Tristram's absence are symbolized not only by the waves of the eternal sea, but by the ageless motion of seabirds in flight. Isolt sees the "white birds everywhere, flying . . . flying." And then . . .

> Alone with her white face and her gray eyes,
> She watched them there till even her thoughts
> were white,
> And there was nothing alive but white birds
> flying,
> Flying, and always flying, and still flying,
> And the white sunlight flashing on the sea.

I am indebted to numerous translators for passages cited in my paper from the following works and authors: Alcman: J. M. Edmonds *(Lyra Graeca*, I, The Loeb Classical Library, 1934); ancient Irish poem: Kuno Meyer *(Selections from Ancient Irish Poetry*, London: Constable and Co. Ltd., 1913); Cornelius Agrippa *(Book One, Natural Magic*, edited by Willis F. Whitehead, 1893); *Aeneid:* H. Rushton Fairclough (The Loeb Classical Library, 1942); *Vita nuova:* Thomas Okey (The Temple Classics, 1933); *The Iliad:* A. T. Murray (The Loeb Classical Library, 1946—with minor changes); *The Inferno:* H. R. Huse *(The Divine Comedy*, New York: Rinehart and Co., 1954); St. Ephraim (cited in the Rev. William Wood Seymour's *The Cross in Tradition, History, and Art*, 1898); *The Little Flowers of St. Francis of Assisi:* T. W. Arnold (New York: Frederick A. Stokes Co., 1925); Marcus Aurelius: anonymous translator (Cincinnati: Johnson and Hardin, n.d.); Bede's *The Ecclesiastical History of the English People:* John Stevens and Lionel C. Jane (Everyman's Library, 1944); Plato's *Phaedrus:* B. Jowett *(The Works of Plato*, New York: The Dial Press, n.d.); St. Gregory (cited by Dom. Cuthbert Butler in *Western Mysticism*, New York: E. P. Dutton and Co., 1924); Pyramid Texts (cited from Adolf Erman, *The Literature of the Ancient Egyptians*, New York: E. P. Dutton and Co., n.d.); Herodian (cited in William Smith, *A Dictionary of Greek and Roman Antiquities*, 1871).

Almonte Charles Howell, Professor of English and Secretary of the Faculty, came to the University as instructor in 1920. He holds the A.B. degree from Denison University, and the M.A. from Columbia. In 1924 he received his Ph.D. here; his thesis, "The Learning of Sir Thomas Browne," was under the direction of Dean Edwin Greenlaw. Until the closing of the School of Engineering, he was in charge of English courses for Engineers, at the same time continuing his interest in seventeenth century English literature through course offerings and the publication of articles. He has also published three texts in technical writing.

From 1946 to 1948 he was Visiting Professor in the Exchange program of the Department of State, at the University of San Carlos in Guatemala, where he established a department of English and gave courses in language and literature. A series of lectures which he gave there on American literature were published by the University of San Carlos.

At the University he served on the staffs of the Dean of the Graduate School, the Dean of the College of Arts and Sciences, and the Dean of the General College before assuming his present post as Secretary of the Faculty.

The lecture printed here was delivered May 4, 1954 in Gerrard Hall.

A DOCTOR LOOKS AT RELIGION*

By A. C. Howell

Professor of English and Secretary of the Faculty.

When a certain American surgeon was shown the skull of Sir Thomas Browne in the museum of the Norwich Hospital, where for seventy years it was on exhibit, he is said to have "laughed heartily," claiming that it was the skull of a Peruvian Indian, since it had such a "markedly receding frontal"; in other words, it was the skull of a "low-brow." Surreptitiously removed in 1844 from the worthy doctor's coffin which was buried under the floor of the chancel in St. Peter's Mancroft in Norwich, the skull doubtless attracted the interest of the local phrenologists, for a cast was made of it which is still to be seen. How could it be the skull of the great thinker, the learned Doctor Browne, certainly a "high-brow" if ever there was one! But that it really was Sir Thomas Browne's skull no doubt existed.

So, in 1922, when the Rector and Vestry of St. Peter's asked to have the skull removed from the museum that it might be once more decently interred with the rest of the bones, under the monument to the church's most illustrious member, the hospital authorities decided that it should be carefully examined by experts. The result was a monograph in *Biometrika* (XV: 1-76; 36 plates) studying the skull from all possible points of view. The study would have pleased the good doctor, whose curiosity was never satisfied and who had himself studied many a skull and written with majestic pomp on the mortality of man. But that is another story. What concerns us here is the startling conclusions which the authors reached. "This outstanding peculiarity of the skull, . . . " (the "markedly receding frontal") they write, "seems to suggest a defect of marked development in that part of the brain intimately correlated with powers of concentration and discrimination." Admitting that Browne has "charmed many generations of English readers," they ask "do his writings suggest great powers of concentration?" "He was, " [they add] ". . . a lover of literature and not a scientist . . . We should rather anticipate that the sense of rhythm, the appreciation of sound and music, the artistic rather than

---

* Many persons have had a share in the preparation of this lecture; I wish especially to express my gratitude to my colleagues, Dr. Nathan Womack, Dr. Macon Cheek, Dr. Preston Epps, and Dr. Sterling Stoudemire, who helped me with various matters of bibliography and translation. Also, I am deeply grateful to Miss Georgia Faison, Miss Myrl Ebert, and Messrs. Cook and Littleton of the University of North Carolina Library staff, and to the librarians of the Duke University Rare Book Room for many favors.

To reduce annotation to a minimum, I have given a general reference for quotations from articles, only the place and date for books, with page references after the quotations, and no references at all for quotations from Browne's *Religio Medici*. The text used is Jean-Jacques Denonain's (Camb. U. Press, 1953). I have modernized the spelling.

the logical side of mind would be markedly developed in him. Hence it is possibly not reasonable to demand that Sir Thomas Browne must have been 'high browed.' " (pp. 67-76)

Theirs is one verdict: "low-brow," "no scientist," and "unable to discriminate"—such is the picture they leave us of "the learned Sir Thomas Browne." Whether his brow was low or not, he remains a charming companion who demands and receives our considered attention. Nor is it necessary to agree with their conclusions: Gordon K. Chalmers has clearly shown that Browne was a "true scientist," very much a man of his age, who, "in the time of its formation . . . participated in the modern idea of scientific progress." *(Osiris* II: 28-79) The charges that he lacked powers of concentration can be confuted by anyone who takes the trouble to read the closely reasoned and cogent arguments which introduce his *Vulgar Errors,* that storehouse of evidence confuting the popular superstitions and old wives' tales of his time; a work which, writes Geoffrey Keynes, "is a wonderfully faithful mirror of the popular mind of the seventeenth century." Indeed, "some of the 'quaint' errors Browne attempts to confute are not obsolete," he continues, "people still believe that moles are blind, etc. . . . let us not despise Sir Thomas Browne's old cabinet, which may be a little out of date but is not half so dusty as the minds of some of those that scoff." *(St. Bartholomew's Hosp. Jour.* [June, 1912: 158-61]) That he lacked powers of discrimination is easily confuted by careful study of the *Religio Medici,* where the great problems of faith and reason are handled coherently and rationally. The truth is that critics have found Browne a controversial figure ever since the first surreptitiously printed copies of *Religio Medici* stole from the press to entertain Sir Kenelm Digby, who sat up all night to read the book. For Browne is, himself, as he said, the "great amphibium," living in divided and distinguished worlds; and those who read him are struck now by one, now by another phase of his many-sided and kaleidoscopic personality. Let us admit that he was no Hobbes or Newton, or Locke. He has, I think, a legitimate claim upon our attention today because he wrote with acuteness of mind, vigor of phrase, and charm of style on one of the great concerns of all educated men from the dawn of science to our own day—the relation of learning, particularly science, to religion. His thirty thousand-word essay, the *Religio Medici,* immediately caught men's attention, and has never lost its appeal. It is on almost every list of great books, and hardly a year passes without a new edition or a reprint of an older one. In fact, the topic for this lecture was first suggested to me by the appearance last year of a new and definitive text edited by Professor Jean Jacques Denonain, who for the first time has collated the eight extant manuscript versions, and the thirteen printed editions which appeared during the author's lifetime.

Let us, therefore, consider afresh this essay, still so popular and still timely. Let us ask ourselves what impulses led to its composition, what qualities have given it such a hold on men's minds; and finally, let us ask whether the impulse which led a seventeenth-century English doctor to write so intimately about his religion is still alive in the medical pro-

fession. Do doctors still read the *Religio Medici*, and do they still write their own? Perhaps the title of this essay may by this time become clearer. It should perhaps have been phrased in the plural, "Doctors Look at Religions," for it will begin with mention of an early *Religio Medici* and end with the latest of which I am aware.

II

When the mortal remains of Sir Thomas Browne, who considered himself, as he remarked in the *Religio*, "as wholesome a morsel for the worms as any," lay lapped in his leaden coffin before the high altar of St. Peter's Mancroft, the Rev. John Whitefoot, M.A., chose as the text of his funeral sermon that beautiful passage from Ecclesiasticus (38:1) beginning: "Honor a physician with the honor due unto him; for the uses which you may have of him, for the Lord hath created him; for of the most High cometh healing, . . ."

That the impulse to connect religion and the healing art is a venerable one needs no anthropologist to maintain. And the quotation used for the text of Sir Thomas Browne's funeral sermon was a singularly appropriate tribute to his own striking recognition of that relationship. Among the Greeks, too, the oath of Hippocrates embraces not merely ethical principles but a dependence on the help of divine spirits; and Jesus, the son of God, himself the great physician, sent forth his disciples to preach and to heal the sick. But these are only peripheral references to the problem which sooner or later the man of science who puts his trust in reason and the evidence of his senses and experiments must come to grips with. Perhaps I can put it best in the words of Dr. C. L. Leiboldt, writing in *Lancet* (11: 1494-1497; 1935):

> "All religions recognize that mankind has been given knowledge and skill to heal, and that the professional healer, the physician, has qualified himself by training and experience to deal with the mass of disease to which mankind is subject. But all religions, too, have assumed that spiritual values count for more in man's life than what is material, and that while healing is usually an affair of mundane arrangement, it is occasionally one of faith, to be managed by the direct interposition of non-material forces. These are assumptions utterly beyond argument. They rest on that conception of faith that admits that what is impossible may happen. . . ."

And in the healing art, there has always been a place for religious faith. Through the ages, more than one doctor has recognized the relation of medicine and religion, and written about it.

Now the first of these great expressions, if I may so call it, of a doctor's religious faith, was not written by a Christian; yet the author knew both Jewish and Christian writings and though criticising both, also praised them. Claudius Galen, second century Greek physician, and author of numerous works in medicine, was, therefore, an early representative of a long and distinguished line of medical men who felt the urge to

praise God for His handiwork and did not separate their religious thinking from their scientific ideals.

Browne, who doubtless read Galen in Oxford, was acquainted with the work in which the distinguished physician, describing the human body, takes every occasion to argue for the wisdom of God in his creation; for in the *Religio Medici*, he remarks, "There appears to me as much divinity in Galen his *De Usu Partium*, as in Suarez's Metaphysics."

The *Peri Xreias Morion* is, as Browne indicated, not merely a description of the human body showing its parts, functions, relations and adaptations; but in addition a skillful demonstration of the *techne sophiou Demiurgou* (the wise creator's skill). A familiar pasage from Book III of the work by Galen, who, as Browne once remarked, "nibbled at Moses" has been echoed and re-echoed through the ages. In it Galen rises to a paean of praise, when he writes: "But indeed . . .[some discreet persons] might justly blame and upbraid me for making known the divine word as I do in thus composing a true hymn for the universal creator; but I regard this as being true piety; not that I should sacrifice to him enormous hecatombs of bulls or should burn as incense to him thousands of talents worth of cassia; but that I should first know myself and then should make known to others that however great he is in righteousness, he is equally great in wisdom and power." (The Greek will be found in George Helmrich's edition, [Leipzig, 1907] I, 174) "For the will," Galen continues [I here use the translation of R. Walzer in *Galen on Jews and Christians* (Lon. 1949, p.23)] "to arrange everything in the best possible order and not to grudge good things to anybody is a sign of most perfect goodness, as I see it; and therefore he should be celebrated in hymns, as good; to find out in what way everything might be most perfectly arranged is evidence of the highest wisdom, and to carry into effect everything that he set out to do is the mark of unconquerable power." It is, Profesor R. Walzer remarks, "consistent with Galen's deepest philosophical convictions to hold that the craftsmanship of the Demiurge is equally manifest in the divine order of the sun and stars and in the smallest detail of the human body. Divine wisdom and power and providence can equally be discovered in the microcosm of the animal and in the universe as a whole." "Real piety lies, according to Galen, in praising the Demiurge for his works. . . ." (pp. 23-24) Galen's statement, as we shall see, is remarkably similar in several respects to what Browne was to write in the *Religio Medici* some fourteen hundred years later.

Galen's point that the study of anatomy was truly an aid to piety and afforded proof that a Creator existed and was manifest in his works, appealed to many later thinkers. Indeed Browne need never have read Galen's *De Usu Partium* to have made the statements he did; he could have found the same idea in the devotional writings of the great Spanish mystic and preacher, Luis de Granada. Since Browne's library lists a copy of one work by Luis, his *Libro de la Oración y Meditación*, in an English translation dated 1633, [first made in 1582 by R. Hopkins and published in Paris with the title, "Of Prayer and Meditation,"] he may well have been acquainted with the other famous work, the *Guia de Pecadores*, [first

translated into English in 1614 by Francis Meres under the title *The Guide for Sinners*]. It is significant to remark that both of these works, as well as several other books of devotion in Browne's library, bear dates before the the date of composition of the *Religio Medici.* In the *Guia* (II, xiv) Browne would have read, as I translate the passage, . . . "Galen . . . who, treating in a book on the composition and craftsmanship of the human body, and arriving at a place where the greatness of the wisdom and providence of that Sovereign Creator singularly shines forth, elevated into a profound admiration at such great marvels, as if oblivious of the profession of doctor and passing over to that of theologian, exclaims, saying, 'Others honor God with their hecatombs, which are sacrifices of a hundred oxen; I honor Him recollecting the greatness of his wisdom who knew how to order causes so sublimely; and the greatness of his power, who was able to carry out all that he ordained; and the greatness of his bounty, who in nothing showed enmity to his creatures; thus indeed, did he provide to each one, all that would make it perfect, without any manner of error.'" Two chapters later, Luis quotes a familiar passage from Seneca which Browne also uses in the *Religio Medici.* But this is not a source study, and I have wandered far afield.

I shall therefore conclude these comments on Galen by remarking that his great treatise on the human body seems therefore to have been as much a work of religion as of anatomy, proving for his generation that a physician could sincerely worship God, whose wisdom and power the human body proclaimed. As Galen once put it, "Whoever examines with an open mind the creation, meditating on the parts . . . (for everything displays the wisdom of the Creator) will perceive that what formerly seemed small to him . . . will establish truly an accurate theology, a thing much greater and more to be honored than the whole of medicine." (Bk. IV: Ch. II; Helmrich, II, 447)

Galen's influence was incalculable; and following his lead, the ordinary physician for a thousand years doubtless considered himself to be practicing an art which was the gift of God, based upon a science which was one of the clearest manifestations of God's beneficent wisdom. For it is true that until the dawn of the modern age, no scientist thought of religion and science as separate fields. As Dr. Chalmers remarks, "One of the rights of science for which Sir Francis Bacon and his immediate successors had to contend was the right of open inquiry unhindered by theological and ethical prepossessions . . . all early modern scientists had to insist upon it, Sir Thomas Browne among them." He goes on to say, "Upon first thoughts this dissociation of science and religion appears to be tho very scientific quality which Sir Thomas Browne lacked; . . . But this attitude . . . affects his philosophy and religion rather than his science. . . ." (Osiris: II, 64)

As the Renaissance scientists began, however, to break the bonds of the schoolmen and the conceptions of nature and truth which they held, here and there voices were being raised in defense of a view of life less concerned with magic and more with observation and experimentation.

Of this group, Jean Fernel (1497-1558), physician to the Court of Henry II of France, deserves a place in our consideration of doctors who have written about their religion, for a work of his *De Abditis Rerum Causis* (1548) (Of Hidden Causes), reprinted scores of times in the Renaissance. Carrying on the tradition of Galen, he develops in this remarkable dialogue many ideas which were to be stressed by later writers. Sir Charles Sherington, in two works dealing with Fernel, has so completely analyzed the contributions of the great French physician, the father of modern physiology, that I shall merely sketch in some of the ideas Sherrington has worked out in detail in *Man and His Nature*, (Gifford Lectures, 1937-38, Camb. Univ. Press, 1941) and *The Endeavor of Jean Fernel* (Camb., 1946). Browne refers to Fernel's work more than once, with evident approval, once citing a passage from the *De Abditis*.

A firm believer in what has been called natural theology, Fernel "resorts to God through nature." (Quotations from *Man on His Nature, passim)* "Everything," he says, "is ultimately from God." "To hold man as Nature's work he found in no respect out of harmony with his Christian faith," writes Sherrington. With this Browne is in complete agreement, as we shall see. Like Galen, Fernel "drew from Nature evidence of a sovereign power and intellect which he identified with God." "He had, too, his religion based on Christian verities," for there was room in his system for the Soul. Fernel held the soul to be one. "It," he maintained, "is utterly simple, it cannot be split, it is a spiritual entity . . . disintegration cannot overwhelm it; it cannot perish; it is immortal. . . ." He writes "Look you, suppose a craftsman, with whom all goes well. He is inside a room. To do the work which seems to him good he needs tools. And he needs light to see. So it is with the soul. While within the trammels of the body, the soul in order that it may understand and reason, needs a fit place and useable things. If these fail, it works no more and quits." *(Dialog.* II, c. 4) "Fernel," writes Sherrington, "was probably the greatest physician of his century. This simile of his seems to carry us with him to the bedside of the dying. There, doubtless, many times he stood with that homely, poignant simile in his mind. For him the problem with which he would then be faced was to refit, to reillumine the darkened chamber, which otherwise its occupant, the distressed soul, would quit." *(The Endeavour of Jean Fernel*, p. 80)

Late in life Fernel wrote "Nature is under God's direction . . . Hence, seeing this, for the physician there is in man nothing whatsoever which does not come within the law of nature . . . excepting only his knowledge and his power to will—in short, his reasoning soul." *(Man on His Nature, passim)* Thus, like Cardan and Browne, he saw "the universe as twofold. There is in it on the one hand the visible, the concrete, the corporeal; on the other hand there is in it a world which escapes our sense, incorporeal." (p. 27) It was a realm of spirits, of guardian angels, of demons. This thought, too, is to be repeated by Cardan and Browne.

"We can feel," writes Sherrington, "that he is, in message and ways of thought, not too remote from today. . . ." "He is one who cannot be content to hold his beliefs about Nature and his spiritual creed apart the one

from the other in separate chambers of his heart. He must have them meet and rejoice together." (p. 32) This attitude, too, Browne shared with him. Fernel's book was a landmark in our story of the doctors who wrote on their religious views; and it stands out as the first important Renaissance treatment of the subject of religion and medicine by a layman. As we shall see, Fernel was to have a distinguished group of successors, of doctors who looked at religion, and even today we find echoes of his ideas.

In the year 1575 a great emperical physician and mathematician wrote a book called *De Vita Propria*, his autobiography, the first autobiography of a doctor of which we have any record. It arose apparently from an impulse very similar to that out of which grew the *Religio Medici*, but with important differences. Jerome Cardan was about seventy-five years old when he wrote; Browne not yet thirty. Browne's work, while highly autobiographical, is, as the title states, primarily concerned with his religion; Cardan's, while having much to say, at many points, on his religion, is, as he remarked, "without any artifice, . . ." "nor is it intended to instruct anyone; but being merely a story, recounts my life. . . ." *(De Vit. Prop.*, tr. by Jean Stoner [N.Y., 1930], Ch. I) Actually, it is almost without form, since only a single chapter is devoted exclusively to the narrative of his life. Miss Anna Robeson Barr, in her work *The Autobiography* (Boston, 1909), remarks that Cardan's work formed a new type, the autobiography with "a scientific impulse," . . . a fact which helps us "realize what a wholly fresh idea came to the Italian physician when he set to work examining himself 'as if he were a new species of animal which he never expected to see again.' " ". . . here, in 1575, sits the first psychologist, minutely examining the only case at hand, . . ." (p. 83)

Anticipating the *Religio Medici* by some sixty years, the *De Vita Propria* dwells with the same loving yet detached interest on the problems of the mind and spirit, on faith and religion, as Browne's does. To quote extensively from Cardan's work would rob you of the pleasure of enjoying it for yourselves; nevertheless, I may be indulged a couple of paragraphs which indicate that here was another Renaissance doctor who was deeply religious, who saw no serious gulf between his religion and his science, and who carried over into his impulse to write a desire to analyze his own beliefs, his own personality.

In Chapter 22, "Religion and Piety," Cardan writes: "Though I was born in troublesome times, and have been subject to the influence of many experiences; though in my many journeys I have met men not simply strangers to religion, but indeed the enemies of religion, I have not lost faith; and this I must attribute more to a miracle than to my own wisdom; more to Divine Providence than to my own virtue. Steadfastly, in fact from my earliest childhood, I have made this my prayer: 'Lord God, in thine infinite goodness grant me long life, and wisdom, and health of mind and body.' Wherefore it is no marvel if I have ever been most devoted to religion and to the worship of God." (p. 78)

He has, he says, been ever "in the habit of returning thanks to God for all that has happened to me," both for "favors bestowed," and "in

adversity," for "the light afflictions, as admonitions, wherefrom I might take warning." He recognizes that "God is the dispenser of all my afflictions which, though they may have seemed oppressive at the time, I doubt not were very good in the great order of the universe." (pp. 81-82)

"Let us live, therefore, cheerfully, although there be no lasting joy in mortal things, whose substance is evanescent, inane, and vacuous." (p. 122) He follows this statement with a catatogue of his blessings and concludes, "There is good in the hope for things beyond all hope; good in the exercise of some art in which one is skilled; good in meditating upon the manifold transmutation of all nature and upon the magnitude of Earth." (p. 123)

With Browne and many other contemporaries, Cardan shared a belief in dreams and in guardian angels, who "long attended me," spirits who instructed mortals "in what was yet to come, through dreams, . . . sometimes communicating through natural events, and finally through supernatural . . ." "Likewise," he wrote, "there are good and evil spirits." (p. 242) And finally, like Browne, though he had pride in his profession, his belief in his own importance; he could write, "This alone I ask you, O reader, that when you peruse the account of these marvels you do not set up for yourself as a standard, human intellectual pride, but rather the great size and vastness of earth and sky; and, comparing with that Infinity these slender shadows in which miserably and anxiously we are enveloped, you will easily know that I have related nothing which is beyond belief." (p. 214)

Surely Browne and Cardan were kindred spirits; both were given to dreams and somewhat inclined to melancholy; and the autobiography, with its keen psychological insight, shows the same sort of scientific detachment with which Browne contemplates his own personality in the *Religio Medici*. It is not strange, therefore, that a nineteenth century editor of Browne, J. A. St. John, should have written of the *Religio Medici* (London, 1838): "We have to do with a very extraodrinary production," a kind of confession, for he "enters somewhat at length into the history of his mind's progress and decisions on subjects the most important." (p. IV)

". . . Browne," he says, "at the time of writing this work, appears to have been more particularly conversant with Cardan's autobiography, and Montaigne's Essays, whence he probably borrowed more than one hint, both towards the construction and filling out of his plan." (p. V)

But alas for the early seeker for "einfluss." Browne himself confutes the charge of borrowing from Montaigne, for he says in an entry in his commonplace book, made after he had read in Keck's notes to the *Religio Medici*, that he had gotten the idea for a certain passage from Montaigne: "In a piece of mine, published long ago, the learned annotator hath paralleled many passages with others of Montaigne's Essays, whereas, to deal clearly, when I penned that piece, I had never read three leaves of that author, and scarce any more ever since." (*Works*, Bell, ed. [Lon-1900] III, 354) As for Cardan's *De Vita Propria*, surely Browne would have been anxious to see it if he could have done so. But unless he had had access to a manuscript copy, he could not have used it in the preparation

of the *Religio Medici*, for it first saw the light of day in Paris in 1643, the year after the first edition of *Religio Medici* appeared. By the date of publication of the *Urn Burial*, 1658, however, he had read a copy, for he quotes from the book in Chapter V, citing it in a footnote.

Other Renaissance physicians also expressed themselves on religious matters, attempting to reconcile deep religious convictions with the objective attitude of the true scientist. Walter Pagel, in a monograph on "The Religious and Philosophical Aspect of van Helmont's Science and Medicine," (Supplements to *Bul., Hist. of Med.*, No. 2; Balt. 1944) remarks that ". . . . We live in a period in which the clean separation of religion and science, of belief and knowledge, of vision and reason is felt to be the elementary premise of scientific activity, and so it does not occur to us that this was not always so and that the continuous affirmations of religious motives and purposes in [John Baptist] van Helmont's scientific work might be more than figures of speech or symptoms of a morbid or archaic soul, . . ." (p. VIII) In his monograph he analyzes in detail the mixture of religious mysticism and scientific empericism which animated the work of the great biologist and physician. van Helmont was a contemporary of Browne's, whose works Browne knew and used. It is evidence of the general agreement on matters of religion among scientists of the age that he and Browne, and later Robert Boyle, were deeply pious men whose science was never separated from their religious faith. Dr. Pagel wisely remarks of van Helmont, "I do not hesitate to believe that his religious conviction was a strong incentive for scientific work." (p. VIII) And later, ". . . sound observation and solid knowledge are gifts [van Helmont held] of divine grace which only the God-fearing will obtain. Religious life may thus actively support scientific research." (p. 10) Research into Nature was held to be a form of worship. One way to find God, said Bacon, was in the Book of his Works. Dr. Pagel goes on to point out that van Helmont had another strong religious motive for his scientific work: "*Religious Pragmatism* . . . the desire to help his fellow-creatures by detecting and opening up the divine resources in Nature . . . In this light *Medicine* appears as the ultimate aim of Science and Physics as the means for the conquest of disease." And "Only the God-fearing will eventually attain the art of prolonging life." (p. 12)

I think we may safely conclude, therefore, that while science was making great strides forward, religion was not yet on the defensive and that Basil Willey is overstating his case when he begins his essay on Browne in *The Seventeenth Century Background* (Lon., 1934) with the comment that "Browne is already—at least in the *Religio Medici*—pleading for religion in an age which was beginning to be dominated by science."

For, when young Doctor Browne, fresh from the great continental medical schools, sat down to compose a piece about a doctor's religion, he was not without predecessors, and he was in the best of company. Moreover, it was natural for him to "pen" his thoughts on the question in the form of a religious meditation, for both by his training and by his bent of mind, he was deeply pious. Even his environment favored this, for the age in which he was born was one of much soul-searching, England was

engaged in a religious struggle, and the most popular forms of reading were the religious meditation and the sermon.

I have mentioned that Browne's library contained a copy of one such work, the *Book of Prayer and Meditation* written by Luis de Granada. Not to mention the scores of Bibles, Bible commentaries, works of all the great church fathers and collections of sermons, Browne also had a number of other books of religious meditation which may serve to indicate that he was well read in a type of literature not too far removed from what he was himself preparing to write. I note, for instance, that he owned St. Augustine's *City of God* with a commentary of J. Luis Vives (1622); Martin Luther's *Commentary on the Epistle to the Galatians* (1622), a book which Bunyan preferred to all others except the Bible; Bishop Carlton's *Thankful Remembrance of God's Mercy* (1625); two copies of the English Jesuit Robert Parsons' *A Book of Christian Exercise appertaining to Resolution* (1585 and 1598); two works by the English Jesuit Thomas White, *Religion and Reason* and *The Contemplation of Heaven*; Santa Clara's work on Predestination (1634); Thomas á Kempis' *Following Christ* [The Imitation of Christ]; Erasmus' *On Preparing for Death* (Latin) (1532); two works in French "Of Consolation" (1632 and 1556); the *Summa Theologia* of St. Thomas Aquinas (1634); a Latin book of meditations on the Lord's Prayer (1548); and a Compendium of Christian Doctrines by Jeremy Zanchius (1598).

Let us look for a moment at two of the books Browne owned and doubtless read, to see if they may not furnish one clue to the form and content of his first book. We may begin with Luis's *Book of Prayer and Meditation*, and note what the author says about its purpose:

"That which moved me to treat this material was to make clear that the principal cause of all the evils which are in the world is failure to ponder . . . with attention the things of God. For which cause it appears that the cause of our evils is not so much lack of faith as of consideration of the mysteries of our faith . . .

"For these reasons, although it is obvious that the mysteries of our faith are powerful enough to incline hearts to good, nevertheless, as many Christians never stop to ponder what they believe, they (the mysteries) do not produce in their hearts the works they ought to produce. For as doctors say that to prove medicines it is necessary first that they be applied and directed into the stomachs with the natural heat . . . so also if the mysteries of our faith are to be made beneficial and healthy, it is necessary that they first be applied and directed to our hearts by the heat of meditation . . . And for lack of this (trial) we see at every step many Christians very whole in faith and very broken in life, for they never stop to ponder what it is that they believe . . ." (*Obras* [Madrid, 1906] II, 5-6; author's translation)

Browne was, in the *Religio Medici*, doing just what Luis advised. He was stopping to ponder the mysteries of his faith. More than once he refers to these mysteries. He loves, he says, "to lose himself in a mystery" and thinks that "there are not enough mysteries" in his religion "for an active faith."

Luis's book of meditations covers the topics common to catholic meditative literature, the miseries of sin, the need for repentance, and the glories of heaven. Browne also treated, though in an unsystematic way, some of the same topics; and, in a book he seemed particularly to admire since he owned two copies, Robert Parsons' *A Book of Christian Exercise appertaining to Resolution, that is, showing how we should resolve ourselves to become Christians indeed* (London, 1612), we find similar topics treated. Here we read of the duty of meditation, of man's duty to serve God, of the day of judgment, of sin, and death, and hell, and heaven. One chapter is devoted to "the cause of atheism at this day." Browne treats almost all of these topics, some of them quite fully. In fact the opening sentence of the *Religio*, with its reference to "the scandal of my profession," that is, its tendency to atheism, may reflect Parsons' chapter on that topic. Browne would surely have agreed with Parsons' description of the judgment "which day of judgment he warneth us of before, and foretelleth the rigor and danger in places of holy scripture, to the end we should prevent the same and so direct our lives while we have time in this world, as we may present ourselves at that day without fear and danger or rather with great joy and comfort when so many thousands of wicked people shall appear there, to eternal confusion." (p. 48) I have given sufficient evidence, I believe, to show that the *Religio Medici* is related to that great body of religious and devotional literature which was a marked feature of the reformation all over Europe. It was no doubt partly out of this background that Browne's original impulse to write his account of a doctor's faith grew.

But other factors also impelled him to "compose . . . for my private exercise and satisfaction" his *Religio Medici*. Among these were his own educational experiences both at home and abroad. At the age of eleven Browne entered the famous College of St. Mary established by William of Wykeham for seventy scholars "studying grammaticals, or the art and science of grammar." Then, as now, Wykehamists were put through a rigorous day, which began as described by one Robert Mathew, a seventeenth century scholar, with a Latin hymn and then chapel. The day's schooling was followed by prayers, and the evening study by another chapel. The curriculum, while mainly classical, stressing Latin, had a strong religious emphasis, and included study of the Greek Catechism, and probably the Greek New Testament. It may even have included Hebrew in the upper forms, as did St. Paul's School in London, when Milton was there at about the same time that Browne attended Winchester. Additional tasks usually assigned to grammar school boys in the seventeenth century were taking notes on all sermons and religious lectures, which were to be written out or later recited to the master.

From this early atmosphere of austere study and devotional exercises, Browne may have developed the strongly religious bent of his nature, manifested in all his writings from the *Religio Medici*, written when he was thirty, to the *Christian Morals*, composed long afterwards and not published until after his death in 1682. All his life, doubtless, he followed the admonition he gave his own son Tom when the boy was studying in France. "Hold firm to the Protestant religion, and be diligent in going to church, . . ." he wrote, "be constant, not negligent in your dayly private

prayers and habituate your heart in your tender days unto the fear and reverence of God." (Letter of Dec. 22, 1660; III, 389)

At Oxford also, where he matriculated in 1628, Browne would have felt the continued influence of religion, even as he turned his mind to his future career as a doctor. The master of his college, Dr. Thomas Clayton, Regius Professor of Physic, "was concerned with the souls as well as the bodies of his patients," writes Jeremiah Finch, Browne's latest biographer; and one of Browne's tutors, Dr. Thomas Lushington, later of Norwich, was noted for his liberal views on religious matters. Lushington's ready wit, lively mind, and broad religious views must certainly have appealed to the young man," writes Finch; and, he continues, "It seems reasonable to suppose that Lushington would have been interested in such an unusual young man and that he actively encouraged Browne's wide reading . . ."(*Sir Thomas Browne, A Doctor's Life* . . . [N. Y., 1950], p 44) As for his Oxford undergraduate studies, Browne would have found little to stimulate his interest either in religion or medicine: they were the usual readings and lectures in logic, rhetoric, music, astronomy, geometry, and philosophy, both natural and moral. With metaphysics, largely Aristotelian, the curriculum for the master of arts degree, which Browne received in 1629, probably concluded. And Browne's knowledge and use of the scholastic philosophy in parts of the *Religio Medici* may doubtless be traced to his reading in Aquinas and other scholastics as he pursued the lectures in metaphysics and moral philosophy.

From Oxford he journeyed to the continental medical schools at Montpellier in France, Padua in Italy, and Leyden in Holland. These institutions were the most advanced in Europe, stressing the newer scientific studies of anatomy, chemistry, botany and physics, with much experimentation, even if it were performed only by the lecturer. The old didactic method of memorizing the works of Galen and Hippocrates was here giving way to the newer method of scientific experimentation and inquiry; and old authorities were being set aside in favor of the more accurate facts discovered in the laboratories of the experimental scientists. Browne was a part of this throbbing new advancement of knowledge which took nothing in Galen or Aristotle for granted unless "proved on the senses." Finally, Browne took his M.D. at Leyden, though it was expensive; for as a contemporary wrote, "Mr. Burnet had a letter out of the Low Countries of the charge of a doctor's degree which is at Leyden about £16 besides feasting the professors; at Angiers in France not above £9, and feasting not necessary either." (John Ward's *Diary* [Lon., 1839], quoted by Sir William Osler in "Sir Thomas Browne" *Selected Writings* [Lon. 1951], p. 42) He wanted particularly to receive the new clinical training available there, where students, as they do today, visited the bedsides of patients, took part in the diagnosis, and suggested treatments.

It would be natural that a young Englishman, brought up in a strongly religious atmosphere, suddenly released into the relative freedom of the scientific laboratory and the medical clinic, where all is called in question and doubt is encouraged, should have had long and deep thoughts on religious problems. At Montpellier, Padua, and Leyden Browne learned

much beside medicine. He learned tolerance, he learned that God transcends the credo of any particular sect. He mingled with devout and learned Catholics; he met and argued with atheists; he talked with Calvinists and Lutherans. He sat at the feet of great scientists, who demanded proof and worshipped facts; but he discovered that science did not have all the answers. He asked himself the question, a question which still faces the university student, especially the scientist: what has happened to my childhood faith? What must I reject; what can I believe? The *Religio Medici* is his spiritual autobiography, his account of his triumphant journey from doubt to faith.

One other immediate impulse seems to have set his pen in motion. When young Doctor Browne returned to his native land to practice, he went first to Halifax in the West Riding of Yorkshire, a section of England noted for its strongly Puritan and dissenter groups. From this and the neighboring counties George Fox was soon to make his first converts to Quakerism. The whole region was religiously inclined; and young Dr. Browne was undoubtedly faced with many questions about his own religious convictions from the numerous "professors," to use George Fox's term, with whom he was in daily contact. Thus, soon after he began his practice, he must have decided that it was time to set down his own views on religion as held at the time, that he might clear his own mind, and perhaps enlighten some of his more intimate friends. Thus, some time in the fall of 1635, he began writing. The popularity of what he wrote down for his private recreation is attested by the fact that eight manuscripts of the *Religio* are still extant, none in the author's hand.

He set himself, as well, the task of defending "the scandal of my profession" from such scurrilous attacks as that represented by the current proverb, *Ubi tres medici, duo athei* (Where you find three doctors, you find two atheists), or by Chaucer's milder remark about his Doctor of Physic, whose study was but little on the Bible. Chaucer's remark could never apply to Browne, in whose *Religio Medici* I estimate more than five hundred references to the Bible, ranging from Genesis to Revelation. In fact, like doctors in every age, he seemed to feel a bit on the defensive about the religion of his profession. In his Commonplace book he notes: "Though in point of devotion and piety physicians do meet with common obloquy, yet in the Roman calendar we find no less than twenty-nine saints and martyrs of that profession . . ." (III, 364) But it is time to turn to Dr. Browne's work itself.

To introduce you to this classic is one of the purposes of this lecture. If you come to the reading without preparation, you are likely to miss some of the fine nuances and the implications of Browne's thought. Consequently, I hope you will not be bored if I give you a brief analysis of the course of the thought in the *Religio Medici.* Remembering the time and place of composition, the fact that Browne was a practicing physician, subject to calls which would constantly interrupt his writing, we need not look in the essay for any skillfully organized treatise. It is rather a rhapsody, in the original sense of the word, a collection of thoughts, loosely tied together by the topic, the religion of a doctor. Mingled with the great doctrines of

the Christian faith, are autobiographical passages, psychological insights, and digressions which surprise and delight the reader.

I have tried to discover a pattern of organization, but beyond the general statement that most of the items of the Apostle's creed are treated at one point or another, except the doctrine of atonement, I can make no clear sense of progression out of the arrangement. Part one is concerned with the theological aspects of his religion; part two, with the human applications of it; that much is clear. Part one, which concerns the meaning of Faith, begins with a general observation which classifies Browne as a Christian, a protestant, an Anglican, and a moderate who looks with toleration on other sects and religions; it proceeds to explain in considerable detail that although he does not care to dispute over religious matters, he has firm and well-grounded opinions on the principal tenets of the Christian religion, which he sets forth in detail. Part two deals with "that other Virtue of Charity, without which Faith is a mere motion."

It appears to me that Browne composed the work slowly, at many sittings, paragraph by paragraph or in brief sections, without a careful outline such as he prepared for the first book of the *Vulgar Errors*, which conforms to the best practices of Ramistic logic. A detailed analysis of the contents will show this more clearly.

He begins by saying that not only his birth and education but his reason and his knowledge of the world lead him to accept Christianity of the Reformed faith, though he is tolerant of all religion and is, as he confesses, "naturally inclined to that which misguided zeal terms superstition." In a passage reminiscent of St. Thomas Aquinas he says "At my devotion I love to use the civility of my knee, my hat, and hand, with all those outward and sensible motions which may express or promote my invisible Devotion." I pause over this passage long enough to note that Robert Sencourt (in *Outflying Philosophy* [Lon., 1923]) is surely right in noting that this remark is in agreement with what Aquinas wrote in the *Summa Contra Gentiles*:

> "Moreover man performs certain sensible actions, not to arouse God; but to arouse himself to things divine; such as prostrations, genuflexions, raising of the voice and singing. Such things are not done as though God needed them, for he knows all things, and His will is unchangeable, and he looks at the affection of the heart, and not the mere movement of the body; but we do them for our own sake, that by them our intention may be fixed on God, and our hearts inflamed; at the same time we thereby confess that God is the author of our soul and body, since we employ both soul and body in worship." (II,22)

Browne's statement has subtle overtones which ironically comment on the "sectaries" of his West Riding neighborhood. "Misguided zeal" is a term applied to Puritans; while they in turn spoke of Catholicism and high church practices as "superstitions." He goes on to illustrate his superstition by saying that he likes to practice genuflexion [use the civility of my knee]; removes his hat in church [of my hat; more rabid Puritans and later Quakers kept theirs on in Church and George Fox had his re-

moved several times by bystanders] and uses his "hand with all those outward and sensible motions which may express or promote my invisible devotion." [This may mean executing the sign of the cross, or simply clasping his hands in an attitude of prayer; but whatever he did, it was anti-puritan.]

In the next sections Browne explains that he is an Anglican; and though he prefers to avoid disputes in religion, he has entertained a number of errors which could hardly be called "heresies." He borrows his rules of religion not from Rome or Geneva, but from "the dictates of my own reason;" but he is so open-minded that he says "I could never divide myself from any man upon the difference of an opinion or be angry with his judgment for not agreeing with me in that, from which perhaps within a few days I should dissent myself." "T'is . . . far better," he concludes, to enjoy truth "with peace than to hazzard her on a battle." For "I perceive that every man's own reason is his best Oedipus," to loose the bonds of error. "In philosophy [i. e., science], where truth seems double-faced," he continues, "there is no man more paradoxical than myself; but in Divinity I love to keep the road."

Religion, Browne concludes, is a mystery, but there aren't really enough impossibilities in religion for an active faith. "I love," he says, "to lose myself in a mystery, to pursue my reason to an *oh altitudo*." And by contemplating the mysteries of religion, he answers all the objections of his rebellious reason "with that odd resolution I learned of Tertullian *Certum est quia impossibile est*," and thus he teaches his "haggard and unreclaimed reason to stoop unto the lure of Faith."

Now Browne is ready to examine his particular beliefs in more detail: the Nature of God, the mystery of the Trinity, God's widsom. God is honored by man when he traces God's wisdom in His works. "The wisdom of God receives small honor from those vulgar heads that rudely stare about and admire his works; those highly magnify him whose judicious inquiry into his acts and deliberate research into his creatures return the duty of a devout and learned admiration." Here speaks the truly devout scientist of the age. The study of nature is a way of worship, says Browne, as had Fernel and Helmont, and goes on to quote an axiom which Aquinas also had used: *Natura nihil agit frustra* (Nature does nothing in vain). Thus he collects "his divinity" from two books "besides that written one of God, another of his servant Nature, that universal and public manuscript that lies expansed unto the eyes of all." Nature and art are not at variance, he concludes, "they both being servants of his providence . . . for Nature is the Art of God." Was Browne aware when he wrote that climactic sentence that Dante had written it before him in his Latin treatise *De Monarchia*? Perhaps it came to him out of some college lecture in Italy.

A firm believer in Providence, the "mere hand of God," Browne concludes that God is "the true and infallible cause of all." Atheism is, he maintains, the result of "The bad construction and perverse comment on . . . second causes." Where reason is at variance with faith, Browne solves the "sturdy doubts" of his reason, in matters of Divinity, by conquering them on his knees. He does not see how one can be an atheist;

and having perused the "Rhetoric of Satan," he finds "nothing that may startle a discreet belief." He has, it is true, a "Catalogue of doubts" in Divinity, but they are "not worthy our vacant hours, . . . Pieces only fit to be placed in Pantagruel's Library."

Browne evidently loved to consider these "niceties" of scripture which are not "points of faith and therefore may admit a free dispute." He refers at least three times in the *Religio* to such disputes; one was with a Jesuit, one with a Franciscan, and another with a "Divine in France." Yet never does he doubt the essential facts of the holy Scriptures. He flatly maintains that they are "the Word of God," a work "too hard for the teeth of time."

After a brief digression on the attitude of the Jews, who are obstinate in denying Christianity, and Christians, who are inconstant in accepting it, Browne comments on persecution and martyrs, concluding that "I would not perish upon a ceremony." He agrees with Falstaff that "Discretion is the better part of valor," and says: "The leaven . . . of all not only Civil but Religious actions is Wisdom."

Next he considers a collection of beliefs current in his time having to do with the spirit world. In general it may be said that he is in agreement with other scientists of the age, like Paracelsus, Cardan, van Helmont, and Bacon. He believes in miracles because, as he puts it, "I hold that God can do all things," and in witches, since, "I hold that the devil doth really possess some men . . ."; and in the unseen world of spirits, for, he says, "I am sure there is a common spirit that plays within us, yet makes no part of us; and that is the Spirit of God." Therefore he makes no scruple of believing, as Cardan did, in Guardian Angels. Following the scholastic philosophy in describing the nature of angels, as spiritual substances; "in brief," he concludes, "I conceive light invisible, and that is a spirit." Man partakes of the nature of angels and is "the breath and similitude of God." He is, therefore, "that great and true *Amphibium*, whose nature is disposed to live . . . in divided and distinguished worlds."

In fact, he goes on, "The whole creation is a mystery" and man's spiritual nature not the least. "In our study of anatomy there is a mass of mysterious philosophy," he writes, referring to Galen, and concludes, "Thus we are men, and we know not how; there is something within us that can be without us, and will be after us . . ." Consequently, since he believes in the immortality of the soul, he is not afraid of death. He is rather "not so much afraid as ashamed of" it.

Life and death are both mysteries, and, "our ends are as obscure as our beginnings." But, trusting as he does in the providence of God, he holds "that the souls of the faithful, as they leave Earth, take possession of Heaven."

After some very personal comments he concludes that "the line of our days is drawn by night, and the various effects therein by a pencil that is invisible; wherein though we confess our ignorance, I am sure we do not err if we say it is the hand of God."

As he thinks of the last things, he is reminded of the day of judgment; and in words strangely like the *Dies Irae*, he composes a prose lyric beginning, "This is the day that must make good that great attribute of God, his justice . . . This is that one day that shall include and comprehend all

that went before . . ." He is not concerned about how the dead shall arise, though he firmly believes that "the life . . . and spirit of all our actions is the resurrection, and stable apprehension that our ashes shall enjoy the fruit of our pious endeavours." The "how" does not concern him, for, "many things are true in Divinity which are neither inductible by reason, nor confirmable by sense."

Heaven, Browne cannot define strictly, but to him it is "where the soul hath full measure and complement of happiness; where the boundless appetite of that spirit remains completely satisfied . . . wherever God will thus manifest himself, there is Heaven." Similarly, Hell is a state, for Browne, not a place. "Surely," he exclaims, "though we place Hell under Earth, the Devil's walk and purlue is about it . . . The heart of man is the place the devils dwell in; I feel sometimes a Hell within myself" and "there was more than one Hell in Magdalene when there were seven devils, for every Devil is an Hell unto himself." Did Milton know these words when he makes Satan say, "Why this is Hell, nor am I out of it." But Browne is not to be scared into heaven; he "would serve God without a Hell."

What amazes him is God's mercy; therefore it is "a debt of gratitude from the obligation of our natures, states, and conditions" that we adore him.

Salvation is to be found in Christ alone, Browne believes; otherwise all are doomed. "There is no road or ready way to virtue; it is not an easy point of art to untangle ourselves from this riddle or web of sin." "We naturally know what is good, but naturally pursue what is evil . . . In brief we are all monsters; that is a composition of man and beast." Browne therefore concludes that though he desires "with God that all," he affirms "with men that few shall know salvation."

He believes, too, in the church universal, and in an amusing passage reduces to absurdity the claims of particular sects to have the keys to heaven's gates. "There must be . . . more than one St. Peter," he exclaims. He cannot understand the doctrine of Predestination, but he hopes that, while he may not "aspire unto the first ranks," he may "be but the last man and bring up the rear in Heaven."

Finally, he will not take the extreme position of decrying good works and relying only on Faith, for merit has its claims, too. He wonders, too, where to find "true faith, such as God requires," for "that which we boast of is not anything, or at least but a remove from nothing." And as if to protect himself from critics, he says that he holds all these beliefs only if they square "with maturer judgments," and disclaims them if they are not authorized by "the learned and best judgments." Thus he proclaims himself still the sceptic in the seventeenth century sense, the open-minded seeker after truth, as Miss Margaret L. Wiley has so beautifully explained in her volume, *The Subtle Knot.*

Since Part II of the *Religio Medici* is an intensely autobiographical commentary on the Christian virtue Charity, I shall not give a detailed synopsis of it here. While defending the dignity of man as an individual, Browne dwells with delicate complacency upon his own natural instincts, tastes and temperament. He can "digest a salad gathered in a churchyard, as well as in a garden." "All places, all airs make unto me one

country," he continues; and adds, with typical British aplomb, "I am in England everywhere." In the first sections he defines charity as a "merciful disposition and humane inclination," which enables him to say, "I am averse from nothing; my conscience would give me the lie if I should absolutely detest or hate any essence but the Devil." He practices charity "to fulfil and accomplish the will and command of my God." Nor does he feel that giving alms "can comprehend the total of charity," for to share his knowledge and skill is a kind of charity, "as many ways as we may do good, so many ways may we be charitable."

It is, he maintains, a breach of charity to condemn a whole nation; nor is he angry with "the multitude in their proper humors," for "the community of sin doth not disparage goodness," and "They that endeavor to destroy Vice, destroy also Virtue," a point Milton was to make a few years later in the *Areopagitica*. Consequently, Browne feels, "No man can justly censure or condemn another, because no man indeed truly knows another," and also "no man knows himself." "Charity begins at home, is the voice of the world;" yet, concludes Browne, "every man is his greatest enemy."

Browne cultivates two virtues, sympathy and friendship. "I cannot . . .," he says, "frame a prayer for my particular self . . . without a catalogue of my friends . . . I never hear the Toll of a passing bell . . . without my prayers . . . for the departing spirit. I cannot go to cure the body of my patient but I forget my profession and call unto God for his soul." And a note in his commonplace book reminds him "To pray daily and particularly for sick patients . . . "

He holds revenge beneath contempt and "that to hate another is to malign himself." His "battle of Lepanto" is not with outward enemies, it is within him. "Passion against Reason, Reason against Faith, Faith against the Devil, and my conscience against all. There is another man within me that's angry with me, rebukes, commands, and dastards me." And although he has many vices, inherited from Adam, he is free from "that mortal enemy to charity . . . Pride." His general love of mankind leads him to deplore the "sordid and unchristian desires" of his profession: he does not wish for plagues, "unwholesome springs or unseasonable winters." "Let me be sick myself if sometimes the malady of my patient be not a disease unto me; I desire rather to cure his infirmities than my own necessities; where I do no good, methinks it is scarce honest gain." What a noble ideal for a physician Browne has there recorded.

And his charity goes further. "Methinks," he writes, "there is no man bad, and the worst, best . . . " He is not afraid of the poison of others. " 'Tis I that do infect myself, the man without a navel yet lives in me . . . Therefore *Defenda me Dios de me*, Lord deliver me from myself, is a part of my Litany."

His life, "a miracle of thirty years" is not to be related as a "history but a piece of poetry," his happiness, the result of his contentment with his lot; and he thanks God even for his happy dreams, which presage his future state, for "we are somewhat more than ourselves in our sleeps, and the slumber of the body seems to be the waking of the soul." So he prays:

"The night is come, like to the day;
Depart not thou, Great God, away . . . .
How ere I rest, Great God, let me
Awake again at last with thee . . .
O come that hour when I shall never
Sleep again, but wake forever."

"This is the dormative" he takes "to bedward." He has no need of "laudanum"; his contentment lets him "close" his "eyes in security."

In his daily life he tries to excel in practicing the golden rule; though not rich, nor a slave to avarice, he finds "more rhetoric . . . than in a library of sermons" in that one sentence, "*He that giveth to the poor, lendeth to the Lord.*" "Upon this motive only, I cannot behold a beggar without relieving his necessities with my purse, or his Soul with my prayers." Charity, he concludes, may be summed up thus: "to love God for himself, and our neighbor for God. All that is truly amiable is God, or as it were, a divided piece for him . . . Nor is it strange we should place affection on that which is invisible; all that we truly love is thus."

What is happiness, he asks, in his final paragraph. "That wherein God himself is happy, . . . in whose defect the devils are unhappy, that dare I call happines . . . whatsoever else the world terms happiness, is to me . . . a story out of Pliny, a tale of Boccace . . . " And he concludes his *Religio* with a prayer that God will bless him with "peace of my conscience, command of my affections, the love of thyself and my dearest friends, and I shall be happy enough to pity Caesar."

Thus I have summarized in some detail this, the greatest of the efforts of doctors to describe and explain the religion of a medical man. It would be difficult to conceive of a more entertaining or a more satisfactory one. Browne has so effectively bridged the chasm between religion and science that doctors as well as lovers of good literature have cherished his work ever since. No less than eighty-five imitations have appeared, the latest in 1948, entitled *Religio Chirurgi*, written by a Canadian surgeon.

Browne's problem was not an easy one, and his effort has sometimes been misunderstood, as when the Catholic Church placed the book on the *Index* or when Tobias Wagner (cited by D. J. Lewis in *Canadian Med. Assn. Jour.* 59: 477-482.), a seventeenth century puritan, noted that in the *Religio Medici* "the seeds of atheistic impiety are so scattered throughout the book that it can hardly be read without danger of infection." That these strictures are unfair is obvious. Browne's work was more than a mere creed, a set of beliefs; he was trying to probe the problem to its depths.

When Browne said that there were not mysteries enough in religion for an active faith, when he said he loved to lose himself in a mystery, when he spoke of himself as living in divided and distinguished worlds, he was only expressing a profound and simple truth in the paradoxes which he loved. He was not, as some modern critics believe, putting his religion in one water-tight compartment and his science in another—he knew that that way spelled ultimate disaster for religion, as one by one the redoubts of faith fall before the onslaughts of relentless and determined

reason; and the realm of faith grows smaller and smaller. Nor was he, as some have thought, abandoning the cause of religion to let faith be a plaything and a toy for his recreation during his idler moments. No, he was stating for himself and for many of his thoughtful contemporaries that subtle but necessary distinction between the kinds of knowledge on which reason can work and those which are above and beyond her. "I recognize," he seems to be saying, "a world in which the laws of my finite mind, logic, experience, authority, operate; there I am at home as a scientist and a thinking animal. But I also recognize, by an act of pure faith, that outside of this realm of the operation of laws, outside and beyond Nature, is something which gives value and validity to all these things. I can by reflection, catch glimpses of it now and then. I gather reports of it from a variety of sources. I cannot describe what I assume. I may call it . . . 'a circle whose center is everywhere and his circumference nowhere'; but by my science I cannot prove it. So, I live not 'in distinguished and divided worlds' because sometimes I am a fideist and sometimes I am a philosopher: I live as a 'great amphibium' because I am never unaware of that other world of the spirit, 'the gentle gale and warm ventilation' of the world beyond and above the world of the sense."

"My soul, there is a country
Far beyond the stars,"

thus Vaughn put the matter in his poem "Peace."

Browne's approach is not very different from that of Professor C. A. Coulson in his McNair Lectures of 1954. In his book, *Christianity in an Age of Science,* Dr. Coulson proposes a similar solution. Summing it up in a review of the book in *Nature* (Aug. 29, 1953, p. 376), W. R. Matthews put it thus: "The short answer to the question, why there are two views of the universe, the religious and the scientific, both well-founded, is that they are two distinct views of the same object." Browne would have accepted that statement.

Let us make one more attempt to defend Dr. Browne in his McNair Lectures of 1635, as he grapples with the problem of faith and reason. Our mundane reason tells us that a man is a man; and a god is a god. So if we say that a man is a god we transgress our logic pattern of *either or. Either* he is a man; *or* he is a god; he cannot be both, any more than a grain of corn can *be* a corn-stalk or an acorn can *be* an oak.

It may be *one* or the *other,* but not *both at once.* Yet we read that the Word became flesh and dwelt among us. So St. Paul believed by a leap of faith that what by reason was foolishness to the Greeks, because unreasonable, was nevertheless a fact—"Christ, the Power of God and the wisdom of God." That leap of faith above and beyond the power of reason was the leap that Browne made when he said that he loved to lose himself in a mystery. It is a recognition which profound seekers after the mysteries of this microcosm that is man or this macrocosm that is the universe sooner or later arrive at.

III

It is a curious commentary on Browne's hold over our sensibilities that almost from his first appearance, his writings have struck a responsive chord in the minds of other writers and critics, from Dryden's time to our

own. As Spenser is the poet's poet, so Browne may in a sort be said to be the essayist's essayist. Johnson, Coleridge, Lamb, Stevenson, Pater, Leslie Stephen, all dwell with loving appreciation on his charm, his freshness, his marvelous handling of words, and his rhythms. But the doctors have taken him unto themselves; and scarcely a year passes without some *medicus* discovering afresh and writing with enthusiasm of the *Religio*. "Doctors by the score have found it to be the kind of book one keeps by one's bedside for years at a time. . . . Osler felt that no other volume had so much influence in his life." writes Dr. D. J. Lewis (*Can. Med. Assn. Jour.* [59: 477-482]). It also has doubtless encouraged many to develop more fully their own ideas on the religion of a doctor. The remainder of this lecture will sketch briefly some modern discussions of the theme, both as tributes to Browne, and as independent treatments of the religion of doctors.

Indexes to medical literature over the past twenty years list dozens of articles on religion by doctors and surgeons. And in volumes of essays and biographies are found others. Revival of interest in Browne's work may be traced to Sir William Osler, the great Canadian physician-teacher of Johns Hopkins and later of Oxford. For him the *Religio Medici* was "the most precious book in my library." On his bier it lay open at a familiar passage; and "when he was a young man and throughout his exceptionally busy and useful life, it was his almost daily custom to read from this manual," writes Dr. J. M. Taylor (*Am. Jour. Surg.* [29: 159-65]). Browne would ask no higher praise than to be counted, as Dr. Taylor remarks, "the favorite author of the best known, most cultured, most instructive clinician of our generation." In his charming essay on Browne, Osler writes, "For the student of medicine the writings of Sir Thomas Browne have a very positive value. The charm of high thoughts clad in beautiful language may win some readers to a love of good literature; but beyond this is a still greater advantage. Like the 'Thoughts of Marcus Aurelius' and the . . . *Enchiridion* of Epictetus, the *Religio* is full of counsels of perfection which appeal to the mind of youth, still plastic and unhardened by contact with the world. Carefully studied, from such books come subtle influences which give stability to character and help to give a man a sane outlook on the complex problems of life. Sealed early of this tribe of authors, a student takes with him, as *compagnons de voyage*, lifelong friends whose thoughts become his thoughts and whose ways become his ways. Mastery of self, conscientious devotion to duty, deep human interest in human beings—these best of all lessons you must learn now or never: and these are some of the lessons which may be gleaned from the life and from the writings of Sir Thomas Browne." (*Selected Writings*, pp. 60-61)

Osler's own faith, while never fully stated in essay form so far as I am aware, was deep and sincere. His admiration for and acceptance of Browne is evidence of that. In a Harvard lecture entitled *Science and Immortality*, (Boston, 1904) he writes, in language reminiscent of the Bible, "On the question of immortality the only enduring enlightenment is through faith. 'Only believe,' and 'he that believeth,'—these are the commandments with comfort; not 'only think,' and 'he that reasoneth': for these are the commandments of science." (p. 39) " . . . In the presence

of so many mysteries which have been unveiled, in the presence of so many yet unsolved, he (the scientific student) cannot be dogmatic and deny the possibility of a future state; . . ." (p. 43)

A contemporary and colleague of Osler's at the Hopkins, Dr. J. M. T. Finney, has written more at length on his religion. In his autobiography *A Surgeon's Life* (N. Y., 1940) he writes: "I should not feel that I had been true to my convictions if I did not make clear my position as to the part that religion should play in the practice of medicine and surgery in general. It is not necessary to parade in public one's beliefs and practices . . . " (p. 330).

"No, it is not necessary for a doctor to try in any way to force his religious beliefs or practices on his patients . . . All that is necessary is that he himself should quietly live his religion in his daily professional life and be ready, when occasion arises, to speak a word of encouragement to some sick and discouraged soul in need of spiritual as well as physical help. The doctor who holds this point of view will not lack opportunities to put his religion into actual practice. . . .

"As a doctor myself, I am well aware of the attitude of cynicism and doubt, even active hostility, toward religion that unfortunately exists in the minds of medical men." "It is," he continues, "by no means universal. The names of many, both living and dead, who stand high in the annals of pure science and scientific medicine, can be found enrolled as humble, devout followers of the Great Physician," and he concludes this passage by exhorting medical men to "add to our technical professional 'armentarium' the further endowment that comes from the beneficent effect of religion in our own lives, in order that we may be able in some measure to impart its healing virtues to the sick who may come under our professional care." (pp. 330-31)

But the clearest expression of Dr. Finney's own religion is found in a talk he once made to a group of medical students, and published in the *New England Journal of Medicine* (216: 16-20). After listing eminent doctors who were deeply religious, men like Oliver Wendell Holmes and Sir William Osler, he continues, "True religion and medicine should go hand in hand, as complementary forces. What is meant here by 'true religion' is that broad, comprehensive expression of religion that embraces the Fatherhood of God and the Brotherhood of Man, that manifests itself as a life rooted in faith and in an all-powerful, over-ruling Providence; a faith animated and inspired by love of God and Man, and bearing fruit in all good works, or as someone has well expressed it, 'The life of God in the soul of Man.' This is the type of religion I believe in and that I offer you. This is the philosophy of life, with God as its central motif, for which I plead and which, after a long life of sincere personal endeavor to practice, I can heartily recommend."

Other modern doctors writing on the subject are more oblique in their approaches to a faith. Yet even in their works one finds evidence of a realization that life is more than a ruthless struggle between the blind forces of nature. Of these, perhaps Sir Charles Sherrington may stand as a representative.

In his Gifford Lectures for 1937-38 entitled *Man on His Nature*, Sir Charles amasses an immense amount of learning to show the changing

attitudes of science toward theology. Never subjective, he views with detachment man's struggle to find meaning and purpose in nature. His two final chapters, "Two Ways of One Mind" and "Altruism", glance repeatedly at this problem. "Mind," he writes, "for anything perception can compass, goes therefore in our spatial world more ghostly than a ghost. Invisible, intangible, it is a thing not even of outline; it is not a 'thing'. It remains without sensual confirmation, and remains without it forever. All that counts in life. Desire, zest, truth, love, knowledge, 'values,' and, seeking metaphor to eke out expression, hell's depth and heaven's utmost height. Naked mind."

And what of "that other concept, energy?", he asks . . . "How much remains? The perceptible world. All that the space-time continuum contains; a category which nothing which does not act on sense can enter and which all that does so act does enter. It sets us wondering whether what we sense can be just purely outcome of our mind.

"Between these two, perceiving mind and the perceived world, is there nothing in common? Together they make up the sum total for us; they are all we have. We called them disparate and incommensurable. Are they then absolutely apart? Can they in no wise be linked together? They have this in common—we have already recognized it—they are both of them parts of one mind. They are thus therefore distinguished, but are not sundered. Nature in evolving us makes them two parts of the knowledge of one mind and that one mind our own. We are the tie between them. Perhaps we exist for that." (p. 261)

Finally, he arrives at an altruistic view of Man as one who can suffer, who has developed values. "In him evolving mind has got so far as to become critical of its way of life. He [man] feels the curse as well as the blessing attached to 'zeal-to-live.'" (p. 281) "Man," he writes, "is above all a leader charged with the survival of the 'values' which are in his keeping. With the 'values' his leadership must be some form of fellowship. The pivot of fellowship is altruism. Fellowship cultivates equality of 'selfs,' equal respect for values and equal rights in values. It asks man to be watchful against himself that he harm not his neighbor. Altruism as basis of cooperative effort, to guide some of the ways of life to nobler common issues. There is so much for men to do in common. A new form of 'zest-for-life,' with knowledge for its tool." (p. 291)

Sherrington's is a dissenter's view. He sees no "higher mind and higher personality" on which man may lean. But even this thought is heartening to him, for he concludes his volume with this significant statement: "Ours is a situation which transforms the human spirit's task, almost beyond recognition, to one of loftier responsibility. It elevates that spirit to the position of protagonist of a virility and dignity which otherwise the human figure could not possess. It raises the lowliest human being conjointly with the highest, Prometheus-like, to a rank of obligation and pathos which neither Moses in his law-giving nor Job in all his suffering could surpass. We have, because human, an inalienable prerogative of responsibility which we cannot devolve, no, not as once was thought, even upon the stars. We can share it only with each other." (pp. 297-98)

But after the Second World War, the forces of religion once more asserted themselves, and we find doctors of today turning to religion as a guide for their lives.

A 1950 volume by Father A. Bonnar entitled *The Catholic Doctor* (N. Y., 1950) states clearly the position of the Catholic Church on religion as it relates to medicine, and a number of recent articles in medical and religious journals take up special phases of it. Dr. W. M. Firore, Professor of Surgery of Johns Hopkins, spoke with deep feeling and sincerity last fall in this very hall, on his own religious certitude. Elsewhere he has written and spoken on the same subject. He would agree with Archbishop Fisher, who in a 1949 address to medical students remarked that ". . . Pure science is concerned only with truth and error, but as soon as you put it to use it involves you in good and evil, in moral judgments. Science canot be a law unto itself, it demands to be subject to a moral control of its uses. Both science and moral judgment are possessions of Man. Man is greater than the things he possesses . . . You see and deal with man as a physical body. But you are never unaware that he is something more . . . Well, there are three problems or mysteries. Is creation an accident or a design, and if a design, can we read it? Is the moral judgment an illusion or in truth a reflection of something in the design and a matter of moment? Is man a person or a thing—and if a person, confined within the physical order or reaching beyond it, and if so how far? Neither a man nor a doctor . . . can be at peace and purposeful without some kind of an answer . . . " And, he concludes, "The doctor needs to be anchored to a Faith as good and compelling, true and exacting, as that of a priest. . . . He must have a creed that impels him to value, care for, respect each man; and if he is to have it, it must be a creed which governs him himself. For I believe that what men look for and need and pray for in a doctor is something over and above his skill in medicine. It is a sure touch—in the things of the spirit. . . . " (*Lancet* 2: 775-776 [1949])

A significant treatment of all these problems is offered in a recent symposium entitled *The Doctor's Profession*, edited by Daniel T. Jenkins (Lon., 1949). Admitting that "the doctor is a technician," the symposium goes on to say "but because he deals not with machines but with human beings his technique is of a different order from that of the usual scientific technician. Here the Christian teaching about the uniqueness of each individual comes into play . . . what the Christian [doctor] sees . . . is that the technical considerations which must and should enter into his relation with his patient never finally exhaust that relationship. . . . ultimately it is the individual in his mysterious personal uniqueness with whom the doctor has to deal." (p. 29) So Browne thought and felt; in similar terms he expressed his feeling for his patients.

". . . There is a Christian attitude to life and death [continues the essay] which it is necessary to have clear and to come to terms with if familiar moral issues confronting the doctor . . . are to be responsibly dealt with." (p. 29) How well Browne has stated that issue.

The chapter on "The Christian Attitude to Medicine" affirms once more the glowing terms of a Christian faith for the doctor, as they have been stated over and over again in the past "that the universe is not a

fortuitous collection of atoms," that "God has made known to mankind his own nature and his purpose for men in a great historical movement of self-revelation which reaches its climax and fulfilment in the person and work of Jesus Christ," and that "man's true nature is . . . that of a responsible person . . . striving to bring all his relationships . . . into conformity with God's will . . ." (p. 33) With this statement, applied as it is to the work of the doctor as he goes about his healing missions, we might well bring to a close our long and, I hope, rewarding, inquiry into the religion of doctors.

All too many doctors, today, are perhaps untouched by the beauty and grandeur of the theological concepts which moved Galen and Fernel, Cardan and Browne. Yet, as we have seen, a remnant remains to carry on their tradition, and humbly follow the teachings of the Great Physician who came that we might have life and have it more abundantly. Through the ages we have heard some of them speaking out clearly on a doctor's religion. Sooner or later we hear them say each in his own way: "This I believe. I will not explain it by my reason. My reason has led me to this vision, to this sudden moment of insight, to this acceptance of the supra-reasonable. I do not explain it; but I believe it."

Reading Room

UNIVERSITY OF NORTH CAROLINA
EXTENSION BULLETIN

VOL. XXXIV JANUARY, 1955 No. 3

EDUCATIONAL TESTS

THE UNIVERSITY OF NORTH CAROLINA PRESS

CHAPEL HILL MCMLV

Extension Bulletin

Vol. XXVI, No. 1 *University Extension in Action.* By Russell M. Grumman. Price $1.00.

Vol. XXVIII, No. 3 *Lectures in the Humanities.* Fourth Series. Price 50c.

Vol. XXIX, No. 2 *Building World Peace in the Atomic Age: What Are the Responsibilities of the United States in the United Nations and in the Atlantic Pact?* Peace Handbook. Compiled by E. R. Rankin. Price 50c.

Vol. XXIX, No. 3 *Lectures in the Humanities.* Fifth Series. Price 50c.

Vol. XXX, No. 1 *Lectures in the Humanities.* Sixth Series. Price 50c.

Vol. XXXI, No. 2 *Building World Peace: What Is the Responsibility of the United States in the Light of Communist Aggression?* Peace Handbook. Compiled by E. R. Rankin. Price 50c.

Vol. XXXI, No. 3 *Lectures in the Humanities.* Seventh Series. Price 50c.

Vol. XXXI, No 4 *Program Services.* Free.

Vol. XXXII, No. 2 *Building World Peace: What Have Been the Achievements and What Are the Prospects of the United Nations?* Peace Handbook. Compiled by E. R. Rankin. Price 50c.

Vol. XXXII, No. 3 *Lectures in the Humanities.* Eighth Series. Price 50c.

Vol. XXXII, No. 4 *The Strange Journey: A Demonstration Project in Adult Education in Prison.* By Richard McCleery. Price 50c.

Vol. XXXIII, No. 1 *Correspondence Instruction.* Free.

Vol. XXXIII, No. 1 Extra Edition. *Audio-Visual Aids to Schools, Colleges, Churches and Adult Study Groups.* Price 50c.

Vol. XXXIII, No. 2 *Building World Peace: How Can the United Nations Prevent Communist Aggression and Preparation for Aggression?* Peace Handbook. Compiled by E. R. Rankin. Price 50c.

Vol. XXXIII, No. 3 *Lectures in the Humanities.* Ninth Series. Price 50c.

Vol. XXXIII, No. 4 *Producing America's Outdoor Dramas.* By Samuel Selden. Price 50c.

Vol. XXXIV, No. 1 *The Role of the United Nations in the Building of World Peace.* Peace Handbook. Compiled by E. R. Rankin. Price 50c.

Vol. XXXIV, No. 2 *Lectures in the Humanities.* Tenth Series. Price 50c.

MONEY ORDERS, CHECKS OR STAMPS ACCEPTED
ADDRESS: UNIVERSITY EXTENSION DIVISION
CHAPEL HILL, N. C.

UNIVERSITY OF NORTH CAROLINA

EXTENSION BULLETIN

VOL. XXXIV JANUARY, 1955 No. 3

EDUCATIONAL TESTS

School Tests and Materials
204 Abernethy Hall
Chapel Hill, N. C.

Phone 2631

Published four times a year, September, November, January, and March, by the University of North Carolina Press. Entered as second-class matter October 19, 1921, Chapel Hill, N. C.

FOREWORD

The use of standardized tests in instruction has become accepted practice in public schools of today. The need for a central depository where teachers can go to examine and select tests appropriate to their needs and also receive professional counsel on testing problems is always pressing.

Ninety per cent of the State's elementary schools with four or more teachers have used one or more kinds of published tests within the past two years according to 1467 replies to a questionnaire issued by the Department of Public Instruction in a recent survey of testing practices. Almost twenty per cent of these schools have a continuing or long range program of testing.

The services of the School Tests and Materials Office of the Extension Division of the University of North Carolina can be of inestimable value to the public schools of North Carolina in this phase of instruction.

Charles F. Carroll
State Superintendent of Public Instruction

Table of Contents

Foreword 5

Tests and Their Uses 7

Services Available 13
- Professional 13
- Scoring 13

How to Order 14

Descriptive List of Tests 15
- Achievement Batteries 15
- Aids to School Administrators 62
- Aptitude Tests 21
- Art 23
- English Language Arts 23
  - Handwriting 26
  - Reading 27
  - Spelling 36
  - Vocabulary 37
- Foreign Languages 38
- Geography 39
- Health 39
- History 39
- Intelligence—Mental Abilities 41
- Mathematics 49
- Music 55
- Personality and Guidance 56
- Science 60
- Study Skills 62

Index 63

TESTS AND THEIR USES

The Extension Division together with the School of Education would like it clearly understood that their purpose in handling tests is to facilitate the uses of these instruments in improving the learning of children of North Carolina. We believe that testing is an essential part of the learning process, and that pupils learn more rapidly, more accurately, and more permanently when they are tested with well chosen tests. To us the sale of tests is merely the beginning of a program for improving instruction.

In this bulletin we shall discuss three types of tests: (1) Achievement Tests, (2) Intelligence Tests, and (3) Interest Inventories.

Achievement tests are instruments to check upon the outcomes of teaching. If well-selected tests are used, more certain conclusions concerning the results of instruction can be drawn. Best results of learning are reached when both the teachers and the pupils have the goals or objectives of their teaching clearly defined, when materials are so manipulated that progress towards these goals is assured, and when there is an evaluation of the results obtained. Evaluation is always in the form of a judgment—a value judgment. Now these judgments of success or failure are made more clear and more definite when carefully prepared tests reflect the progress of pupils towards the defined goals. Defining the objectives of learning and testing are all parts of the same process. Testing, then, is not an added external activity but an integral part of the educative process.

Teachers have been using tests of some kind since the time of the first school, but their tests have not been too efficient. When two teachers grade the same paper, or when the same paper is graded by the same teacher a second time, wide differences in scores appear. In one case a photostatic copy of a geometry paper was sent to over a hundred teachers of mathematics to be scored. The results were truly ludicrous for the marks ranged from 28 to 92. It is possible to offer study after study whose results offer conclusive evidence that teachers' marks are not accurate.

It was to improve such variations in school marks that *standard achievement tests* were developed. These tests are bet-

ter than the ordinary teachers' hastily constructed examinations in the following particulars:

1. Items are carefully constructed. They are selected by experts usually from facts and principles which occur most frequently in several courses of study. These items are then tried out in a preliminary way and are reworked as a result of this experience.

2. After agreement has been reached on the items to be included in the test, norms for each grade or subject are derived from test scores secured from a large representative sample (in some cases three or four hundred thousand) of the school population of the United States. *These norms are extremely useful as points of reference.* One can by administering such tests to a single class or to several classes in a school system determine the grade level achieved by each class.

3. The scoring is generally objective in that two careful scorers will come to the same conclusion concerning the value of the test.

There are a great variety of standardized tests available. Among them are:

1. **Achievement Tests.** These tests are most like the tests constructed by teachers for use in class. Test batteries which measure progress in reading, vocabulary, arithmetic, language, spelling, etc., are most frequently used. There are also separate tests of reading, arithmetic, language, and other subjects, which cover more completely these areas. Dr. Brown, in this bulletin, discusses the uses of reading tests while Dr. Hunt discusses tests at the high school level.

2. **Intelligence Tests.** By selecting items common to the experience of all children, and by avoiding those dependent upon schooling, it is possible to construct tests, called intelligence tests, which help us discover what a child can do rather than what he has done.

   Intelligence tests have wide spheres of usefulness. They have been found to be of use at the beginning of a child's entrance into the formal school work of the first grade. It

has been shown that a mental age of six as derived from intelligence tests is necessary for a happy mastering of first grade work. Tests show that first grade children vary in mental age from 4 to 8. Intelligence as measured by tests is necessary to learn successfully the usual school work, especially that part dependent upon the mastery of verbal material. Intelligence tests have also been highly useful in defining more precisely the lower limits of learning capacity such as the idiot, the imbecile, and the moron, as well as those of great ability, such as the bright, the very bright, and the gifted. In the areas of educational guidance intelligence tests have been found especially useful because they help us decide whether this failing boy is only lazy or is lacking in ability. They do aid us, then, in guiding children and students into school work where they can work happily. These are only a few illustrations of the great variety of uses to which intelligence tests may be put.

3. **Interest Inventories.** At the high school level such inventories help the teacher, the counselor, and the student to know better what areas of activity are most attractive to the student. This information is helpful in planning for him courses of study and possible occupations. Dr. Ellis discusses interest inventories in his section on the uses of tests in guidance.
4. There are other tests, inventories, rating scales, etc., which are carried by the School Tests and Materials Office of the Extension Division. Among these, tests of mechanical, clerical, and musical aptitudes deserve special mention because they are immediately useful in school. Inventories of adjustment, sometimes called personality tests, should be used and interpreted with the greatest care.

Uses of Standardized Reading Tests

Every teacher knows that continuous evaluation must be a part of good teaching. At the close of each lesson a teacher is appraising the learning which has taken place during the previous period and asking herself how well the children learned what was planned for them. In addition to this continuous evaluation there must be, at stated intervals, a more objective appraisal

of the growth of children. This may include teacher observations, teacher-made tests, informal inventories, and standardized tests.

A study and evaluation of pupil growth seems especially important in a skill area like reading, where the acquisition of basic skills must precede the learning of more mature skills. The current view-point which emphasizes meeting the needs of the individual and taking the child where he is and giving him maximum growth requires the use of standardized tests if the teacher is to know where the child is and what his needs are.

Standardized tests in reading may be classified into two groups: achievement tests and diagnostic tests. The achievement test is a standardized test which enables a teacher to compare those tested with established norms. This enables the teacher to know how the scores of a child, or of a group of children, compare with the test norms. Reading achievement tests usually indicate achievement in relation to comprehension, speed, and vocabulary. Results on reading achievement tests have implications for planning the total program in reading. They do not tell the teacher much about the strengths and needs of the individual.

The diagnostic reading tests are important if the teacher wishes to appraise the strengths and needs of the individual. Some diagnostic tests are of the survey type and may be administered to groups of children. Other diagnostic tests are designed for use with one child at a time. The individual diagnostic test is the more rewarding to use but it obviously requires more time to administer.

The periodic use of standardized achievement tests and diagnostic tests in reading, combined with the use of informal inventories and the careful observation by the teacher, should provide the knowledge of the children which will make it possible for the teacher to develop a program which meets the needs of children and which helps them to become excellent readers.

Uses of Tests at the High School Level

Testing at the high school level serves many of the same purposes that it does at the elementary level. The high percentage of drop-outs, the terminal nature of this level in our

free public school system, and the beginning of specialization or varied curriculums according to future plans, add at the high school level, however, a "last chance" urgency to any attempt to learn more about the capacity, skills, knowledge, interests, or adjustment of the individual or group.

Standardized tests are one means of helping the educator gain a better understanding of students and thus to provide more suitable methods and curriculums. Many believe that the high rate of drop-outs (only about 50% of the nation's fifth-graders graduate from high school and in the Southeast the percentage is much lower) could be reduced markedly through the insights gained by better testing programs.

The following uses of tests are illustrative rather than complete:

For the administrator: (a) to show student achievement and growth; (b) to provide basis for reports to parents; (c) to interpret school level and progress to the community; (d) to provide basis for guidance, sectioning, placement, etc.

For the teacher: (a) to analyze and diagnose problems; (b) to determine educational needs of students; (c) to determine achievement levels of individuals and classes; (d) to evaluate teaching methods and materials; (e) to identify the learners who are gifted, normal, or slow; (f) to help students see strengths and weaknesses.

For the student: (a) to promote motivation; (b) to reveal abilities, aptitudes, weaknesses; (c) to gain insight and aid in self-evaluation and improvement; (d) to provide basis for recommendation to jobs or college.

Uses of Tests in Counseling and Guidance

One of the major tasks of the teacher and the counselor is to understand boys and girls as individuals and to help them understand themselves. Experience and research have shown that to do this effectively information must be collected in such areas as home background, scholastic aptitude, special aptitudes, disabilities, personality adjustments, health, interests, past achievement, and plans for the future. Much of this information can be secured by using non-testing techniques such as interviews and planned observation. Other important information

can be collected by using carefully constructed standardized tests. No one technique can be used to the exclusion of others. Each must be used in its appropriate place with due regard being given to the contribution it makes to the total understanding of the individual student.

Tests are particularly useful in the collection of certain types of information. General scholastic ability can be determined with reasonable accuracy by using one or more of several tests which are now available. Special aptitude tests, achievement tests, and interest inventories give useful insights into other important areas. Personality and other tests of adjustment are sometimes used but because of their questionable validity they should be administered and interpreted only by teachers and counselors who are well trained in testing.

The counselor uses test data along with all other pertinent information as he attempts to analyze the pupil and his problems. In this process he works with the pupil in a cooperative attempt to work out plans, adjustments, and decisions based upon the best evidence at hand. Some of this evidence can be secured only through the use of appropriate standardized tests. The job of the counselor is to select, use and interpret those tests which contribute to the better understanding of the pupil. With this understanding, the teacher, the counselor, and the pupil can work more effectively together in bringing about adjustments which are satisfying to the pupil and beneficial to society.

The Advisory Committee to School Tests and Materials:

Carl F. Brown, Ph. D.
Professor of Education

G. Gordon Ellis, Ph. D.
Associate Professor of Education

J. T. Hunt, Ph. D.
Associate Professor of Education

A. M. Jordan, Ph. D., Chairman
Professor of Education

Thelma Gwynn Thurstone, Ph. D.
Professor of Education

SERVICES AVAILABLE

Professional

If a school or school system is planning to develop a testing program, or desires to have their present program evaluated, the School Tests and Materials Office will attempt to secure experts from the School of Education to confer with school officials concerning the selection of tests, administration, and interpretation of results.

Scoring Services for Schools

The University Testing Service is prepared to hand-score or machine-score most tests used in the public schools and also to make such statistical studies and summaries as may be needed by schools to obtain maximum benefit from their testing programs.

The Testing Service makes a charge of 2c *per score* for machine-scoring. If hand-scoring is necessary because of the nature of the test or because of poor marking, the fee will usually be double, or 4c per score. For additions and other simple computations and for looking up percentile ranks, the charge is 1c per operation. When more than 2000 of the same test are to be scored, the Testing Service customarily makes a reduction of 15% on the charges cited above.

Test to be machine-scored require the use of IBM-type answer sheets and electrographic or number 1 *soft lead* pencils. For accurate machine scoring, it is necessary that all marks be black and shiny. Even if students have not marked their papers well while taking the tests, teachers can insure good marking by collecting the test booklets and then having students go over their marks a second time.

Arrangements for scoring should be made directly with the Testing Service, for in this way prompt service can be obtained and definite commitments made as to the time required for scoring. All inquiries concerning scoring should be addressed as follows:

W. D. Perry, Director
University Testing Service
Peabody Hall
Chapel Hill, N. C.

How to Order

The title of each test and the form desired should be indicated. If there is no specific choice of form, state "any form".

Please note the number of pupils to be tested, and order in *packaged quantities* the amount of tests required. We do not break packages, so care should be taken to order the number of packages which will come closest to filling your needs. Most tests are packaged in 35's, although some come in packages of 20's or 25's, and a few are sold individually. Unless otherwise stated, complete accessories come with each package of tests.

Tests will be shipped either by parcel post, motor express, or railway express, whichever is least expensive and most expedient. Transportation costs will be added to the invoice.

Each order should designate the name of the person to whom the shipment is to be sent as well as the school name and complete address. Each order *must* indicate clearly how the charge is to be made.

All orders should be approved by the school principal, superintendent, or supervisor.

Lack of space prevents our stocking a sufficient number of tests for large, extensive programs, so quantity orders should be sent well in advance of the testing date to allow time for us to supply those needs.

Where special orders are requested for tests not stocked, the cost of telegram and special delivery postage will be charged to the school.

Orders should be sent directly to:

School Tests and Materials
Chapel Hill, N. C.
Box 1050

ACHIEVEMENT BATTERIES

CALIFORNIA ACHIEVEMENT BATTERIES

These are group diagnostic and survey test batteries which include tests of reading vocabulary, reading comprehension, arithmetic reasoning, arithmetic fundamentals, mechanics of English, grammar and spelling. They make possible an achievement testing program in the basic skills which is both continuous and functional in accordance with the thinking of modern curriculum and guidance specialists. All levels may be scored in the test booklet; or separate hand-scoring Scoreze pads may be purchased for the Elementary, Intermediate and Advanced Batteries. Machine-scoring Answer Sheets are also available for the Elementary, Intermediate and Advanced Batteries. Separate Answer Pads or Sheets make the books reusable.

Primary Battery, Forms CC or DD
Grades: 1 through first half of 4
Time: 90 minutes
Price: $4.65 per 35

Elementary Battery, Forms CC or DD
Grades: 4-6
Time: 120 minutes
Price: $5.00 per 35
Separate Scoreze pads $.08 each
Separate Machine-Scoring Answer Sheets $.05 each
Stencils for Hand-Scoring the Machine Answer Sheets $.65 set
Machine-Scoring Stencils $1.50 per set

Intermediate Battery, Forms CC or DD
Grades 7-9
Time: 150 minutes
Price: $5.00 per 35
Separate Scoreze pads, Machine-Scoring Answer Sheets and Stencils same as Elementary

Advanced Battery, Forms BB or CC
Grades: 9-14
Time: 150 minutes
Price: $5.00 per 35
Separate Scoreze pads and Machine-Scoring Answer Sheets same as Elementary
Machine-Scoring Stencils $1.90 per set

ESSENTIAL HIGH SCHOOL CONTENT BATTERY, FORMS AM or BM

Contains four tests: Mathematics, Science, Social Studies, and Language and Literature. In each of these areas the test yields comparable measures.

of status that are of value in the appraisal of student progress, evaluation of the instructional program, curriculum revision, and student guidance. The results are also useful in predicting success in college. Easy to administer and score. Profile chart permits the graphic recording of results of the four tests, and aids in their interpretation. Answer sheet is required for each student, and may be hand or machine scored.

Grades: 10-12
Time: Five class periods—one 45 minutes and four of 40 minutes
Price: $7.50 per 35
Answer Sheets $1.80 per 35
Cumulative Individual Profile Sheets $.02 each

GRAY-VOTAW-ROGERS ACHIEVEMENT TESTS, FORMS Q, R, S, or T

These batteries have been validated and had their norms established from the responses of normal-age Southern children attending Southern schools.

Primary: measures the desired skills of attainment in five fundamental areas: reading comprehension, reading vocabulary, spelling, arithmetic reasoning, and arithmetic computation.

Grades: 1-3
Price: $3.00 per 30

Intermediate: contains an adequate number of items to provide for complete testing in all subject-matter fields; elementary science, language, literature, spelling, reading vocabulary, reading comprehension, social studies, health and safety, arithmetic reasoning, and arithmetic computation.

Grades: 4-6
Price: $3.00 per 30

Advanced: contains tests in the same fields as the Intermediate.

Grades: 7-9
Price: $3.00 per 30

IOWA HIGH SCHOOL CONTENT EXAMINATION, FORMS L or M

Based on the month of April—this quick-scoring examination is designed to provide an accurate appraisal of the high school senior's and the college student's knowledge of the four basic areas of the typical academic high school curriculum: 1, English grammar and literature; 2, Mathematics; 3, Science; 4, Social Studies. Total score furnishes an evaluation of the student's general mastery of the subject-matter content in these areas. Part scores reveal fields in which the student is strong or weak. Useful for guidance and remedial work. Can be either hand- or machine-scored. Examiner's Manual and the Scoring Key must be ordered separately.

Grades: 11-12 and college entrance
Price: $3.70 per package of 25 tests, with hand-scoring answer sheets
Extra hand-scoring answer sheets, $.04 each
Machine-scoring answer sheet, $.06 each
Machine-scoring stencils, $.50 per set
Manual $.30

METROPOLITAN ACHIEVEMENT TESTS

The new edition of this battery is arranged in five levels covering grades 1 through 8.

Primary I: Forms R, S, or T, contains tests in word and phrase recognition, word meaning, and numbers.
Grades: 1 and beginning 2
Time: 60 minutes
Price: $2.65 per 35

Primary II: Forms R, S, or T, contains tests in reading, vocabulary, arithmetic fundamentals and problems, and spelling.
Grades: 2 and beginning 3
Time: 100 minutes
Price: $3.15 per 35

Elementary Battery: Forms R, S, T, and U, contain tests in reading, vocabulary, arithmetic fundamentals and problems, language usage, and spelling.
Grades: 3, 4, and beginning 5
Time: 2½ hours
Price: $4.00 per 35

Intermediate Battery Complete: Forms R, S, T, U, and V, contains tests in reading, vocabulary, arithmetic fundamentals, and problems, English, literature, history, geography, science, and spelling.
Grades: 5, 6, and beginning 7
Time: 4 hours
Price: $4.75 per 35

Intermediate Battery Partial: Forms R, S, T, U, and V, contains tests in tool subjects, in reading, vocabulary, arithmetic fundamentals and problems, English and spelling, identical to the corresponding tests of the complete battery.
Grades: 5, 6, and beginning 7
Time: 3 hours
Price: $3.85 per 35

Advanced Battery Complete: Forms R, S, T, U, and V, contains tests in the same subjects as the Intermediate batteries.
Grades: 7, 8, and first half of 9

Time: 4 hours
Price: $4.75 per 35

Advanced Battery Partial: Forms R, S, T, U, and V, contains tests in tool subjects, identical to the corresponding tests in the complete battery.
Grades: 7, 8 and first half of 9
Time: 3 hours
Price: $3.85 per 35

NOTE: If extra accessories are desired for any of the batteries, they must be ordered separately.
Sets of accessories: $.50
Extra Class Records: $.10 each

METROPOLITAN ACHIEVEMENT TEST PROFILE CHARTS

A four-page folder includes a separate chart for each of the lower batteries and one chart for both Intermeidate and Advanced. (For all forms and all batteries.)
Price: $.05 each

METROPOLITAN ACHIEVEMENT TEST NORMS

Special norms and data include tables of traditional grade equivalents for public school pupils in the New England States, North Carolina, and New York State; also percentile norms for beginning 7th-grade pupils in cities of 300,000 population and over. The *Booklets of Norms* include the following regular publications: *Section I: General* age-grade data, list of communities in the standardization, and age calculating tables. *Section II:* Age, grade, and percentile norms for the traditional (total-grade) groups in public schools. *Section III:* Grade and percentile norms for modal-age groups. *Section IV:* Age-grade data and traditional (total-group) grade equivalents for parochial schools. *Section V:* Age-grade data and traditional (total-group) grade equivalents for separate Negro schools.
Price: Booklets, $.15 each

MYERS-RUCH HIGH SCHOOL PROGRESS TESTS, FORMS AM or BM

Measures achievement in high school subjects consisting of 120 items equally divided among English, social studies, mathematics, and science. Useful for group analysis but not for individual student appraisal. Hand- or machine-scored. Separate answer sheets required only for machine-scoring.
Grades: 9-12
Time: 60 minutes
Price: $3.00 per 35
Machine-Scoring Answer Sheets, $1.15 per 35

OTIS CLASSIFICATION TEST (REVISED), FORM T

A combined *mental ability* and *achievement* test that aids in classification of pupils on the basis of mental development and classroom achievement. The achievement test covers reading, spelling, language and grammar, arithmetic, geography, history and civics, hygiene, vocabulary, music and art. The mental ability test is the *Otis Beta Quick-Scoring Test.* Hand- or machine-scored. Separate answer sheets required only for machine-scoring.

Grades: 4-9
Time: 30 minutes for each part
Price: $3.10 per 35
Machine-Scoring Answer Sheets, $1.35 per 35
Machine-Scoring Keys, $.40 per set

STANFORD ACHIEVEMENT TESTS (HAND-SCORING EDITION)

Four complete batteries of tests for grades 1 through 9 providing a wide range of subject-matter coverage at each grade level.

Primary Battery, Forms J, K, or L contains tests in paragrapr meaning, word meaning, spelling, arithmetic reasoning, and arithmetic computation.

Grades: 1.9-3.5
Time: 80 minutes
Price: $2.45 per 35

Elementary Battery, Forms J, K, or L contains tests in word meaning, paragraph meaning, language, arithmetic reasoning, arithmetic computation, and spelling.

Grades: 3.0-4.9
Time: 135 minutes
Price: $2.95 per 35

Intermediate Battery Complete, Forms J, K, or L contain tests in word meaning, paragraph meaning, social studies (both history and geography), science, language, arithmetic reasoning, arithmetic computation, spelling, and study skills.

Grades: 5-6
Time: 215 minutes
Price: $4.85 per 35

Intermediate Battery Partial, Forms J, K, or L contain the same tests as the complete battery except that social staudies, science, and study skills are omitted.

Grades: 5-6
Time: 140 minutes
Price: $4.00 per 35

Advanced Battery Complete, Forms J, K, or L contains tests in paragraph meaning, social studies (history, geography, citizenship), science, language, arithmetic reasoning, arithmetic computation, spelling, and study skills.

Grades: 7-9
Time: 215 minutes
Price: $4.85 per 35

Advanced Battery Partial, Forms J, K, or L contain the same tests as the complete battery except that social studies, science, and study skills are omitted.

Grades: 7-9
Time: 140 minutes
Price: $4.00 per 35

Machine-Scoring Edition

These tests in the two divisions are the same tests as the hand-scoring edition, but the booklets are reusable with machine-scoring Answer Sheets.

Intermediate Battery—Partial, Forms JM or KM

Grades: 5-6
Time: 140 minutes
Price: $5.20 per 35

Answer Sheets:	Arithmetic	$1.15 per 35
	Reading	.95 per 35
	Spelling and Language	1.15 per 35
	Set	$3.25

Machine-scoring keys, $1.00 per set

Advanced Battery—Partial, Forms JM or KM

Grades: 7-9
Time: 140 minutes
Price: $5.20 per 35

Answer Sheets:	Arithmetic	$1.15 per 35
	Reading	.95 per 35
	Spelling and Language	1.15 per 35
	Set	$3.25

Machine scoring keys, $1.00 per set of 5

APTITUDE TESTS

DETROIT CLERICAL APTITUDE EXAMINATION

Designed to discover and select pupils who have abilities suitable for commercial courses. Measures: rate and quality of handwriting, rate and accuracy in checking, knowledge of simple arithmetic, motor speed and accuracy, knowledge of commercial terms, visual imagery, rate and accuracy in classification, and alphabetical filing.

Grades: High school
Time: 30 minutes
Price: $1.85 per 25

(NOTE: The *Ayres Handwriting Scale* is needed in scoring part I of this examination. See HANDWRITING Section)

DETROIT GENERAL APTITUDES EXAMINATION, FORM A

This examination is a new step in the field of aptitude testing. Three kinds of aptitudes—intelligence, mechanical, and clerical—are included in the sixteen-page booklet. It is given as one test to be analyzed later into three fields. Economy of testing has been achieved by using certain tests in more than one type of aptitude. For example, tests 4 and 13 are used for intelligence, mechanical, and clerical aptitudes. The pages are so arranged that the tests of all three aptitudes are scattered among the sixteen pages.

1. The general results are used for purposes of classification of interests which will aid pupils to recognize the values of high school studies.

2. They are used for individual counseling in cases of educational disability, in cases of uneven educational accomplishments, for education guidance, and for possible causes of emotional and social maladjustment. The detailed data on the "Analysis of Results" charts are especially helpful in these cases.

3. The intelligence sections, consisting of ten pages of sub-tests, have five of them with items requiring reading of words, sentences, or other language materials, but the remaining five pages without such materials. Package contains tests, Analysis of Results charts, Answer Key and Record Sheet. Teacher's Handbook must be ordered separately.

Grades: Junior and senior high school
Time: 85 to 90 minutes
Price: $3.00 per 25
Teacher's Handbook $.40 each

(NOTE: The *Ayres Handwriting Scale* is needed in scoring Test I of this Examination)

DETROIT MECHANICAL APTITUDES EXAMINATION, FORM A

This examination measures simple arithmetic, motor speed and pre-

cision, tool recognition, visual imagery, mechanical sizes, mechanical information, rate and accuracy in classification, and imagery of direction and speed of pulleys.

Grades: Junior and senior high schools
Time: 30 minutes
Price: $2.75 per 25

DIFFERENTIAL APTITUDE TESTS

An integrated battery of aptitude tests, providing eight reliable scores useful in educational and vocational guidance at the junior and senior high school levels. Careful research and standardization give assurance of stable scores and meaningful profiles.

Administration is simple. Clear instructions are printed in each test booklet. Convenient time units make it possible for classroom teachers to test in regular class periods, and allow for flexibility in the testing program. The clerical test requires six minutes of actual working time, the two parts of the Language Usage together take thirty-five minutes, and the other tests require twenty-five to thirty minutes each.

Scoring by hand or by machine is simplified by the use of IBM perforated stencils. The charting of results is made easy by use of clear norms tables and a convenient profile report form.

Test Booklets are sold in packages of 25 copies. Seven different booklets are published, since the Language Usage booklet includes both the Spelling and Sentence tests.

	Test Booklets	*Answer Sheets*
Verbal Reasoning	$3.25 per 25	$2.00 per 50
Numerical Ability	2.50 " "	" " "
Abstract Reasoning	3.25 " "	" " "
Space Relations	3.75 " "	" " "
Mechanical Reasoning	4.00 " "	" " "
Clerical Speed and Accuracy	3.25 " "	" " "
Language Usage	3.25 " "	" " "
Individual Profile Charts	1.50 per 50	
Interpretive Manual	2.25 each	

KUDER PREFERENCE RECORD—VOCATIONAL, FORMS CH or CM

This vocational form measures ten broad areas of education and vocational interest: *outdoor, mechanical, computational, scientific, persuasive, artistic, literary, musical, social service,* and *clerical.* A special verification score helps identify those who have not followed directions or have answered carelessly. The test consists of 168 groups of three activities. Students mark the activity they prefer most and the one they like least in each group. The Preference Record is self-administering, and self-inter-

preting profiles are available. The Manual lists suggested occupations for each interest area and combination of two interest areas.

Grades: High school and college
Time: Approximately 40 minutes
Price: **Form CH (Hand-scoring)**
Reusable record booklets with self-scoring pin-punch answer pads, $.50 each
Extra self-scoring pin-punch answer pads, $2.25 per 20
Manuals $.30 each
Profile Sheets $.60 per 20
Form CM (Machine-scoring)
Reusable record booklets, $.50 each
Machine-scoring Answer Sheets, $3.00 per 100
Machine-scoring Keys, Form CM, Set of 22, $7.50
Profile sheets, $.60 per 20
Manuals, $.30 each

STENQUIST MECHANICAL APTITUDE TEST

Covers questions of a general nature about machines and machine parts. Mechanical perception and the ability to reason out a mechanical problem are measured. Results are a guide in advising pupils as to choice of school courses or of a vocation.

Grades: 4-12
Time: 50 minutes
Price: $2.60 per 35
Manual of Directions, $.25 each

ART

MEIER ART JUDGMENT TEST

This test consists of a book of 100 pairs of pictures printed by a special process resembling etching, and a record sheet containing instructions, statements of differences between pairs of pictures, and a means of recording pupil judgment.

Grades: Junior and senior high school
Price: $1.20 per book
Test record sheets, $.04 each

ENGLISH LANGUAGE ARTS

BARRETT-RYAN-SCHRAMMEL ENGLISH TEST

Contains five subtests covering Functional Grammar, Punctuation, The Sentence (parts of speech, parts of a sentence, sentence elements), Vocabulary, and Pronunciation. Content is based on the common content of lead-

ing textbooks and courses of study, the experience of teachers and supervisors using earlier editions, and detailed study of types of students' errors. May be hand- or machine-scored.

Grades: 9-12
Time: 60 minutes
Price: $2.95 per 35
Answer sheets, $1.35 per 35

COOPERATIVE ENGLISH TEST (Single Booklet Edition)

A comprehensive instrument to measure the most important basic English skills. Composed of three tests: *Test A:* Mechanics of Expression (grammatical usage, punctuation, capitalization and spelling). *Test B:* Effectiveness of Expression (sentence structure and style, verbal skill, and organization). *Test C:* Reading Comprehension (recognition vocabulary, speed and level of comprehension). Answer sheets required only for machine-scoring.

Grades: 7-12
Time: 120 minutes; 40 minutes for each test
Price: $5.00 per 25
Machine-scoring Answer Sheets, $2.00 per 25

IOWA LANGUAGE ABILITIES TESTS

There are two tests in this group. Each test covers spelling, word meaning, language usage, capitalization, and punctuation. The Intermediate also covers sentence sense and grammatical form recognition. A *Manual for Interpreting* which must be ordered separately, gives detailed information on diagnosis and remediation.

Elementary, Form A
Grades: 4-7
Time: 48 minutes
Price: $3.00 per 35
Manual for Interpreting either Elementary or Intermediate $.25 each

Intermediate, Form B
Grades: 7-10
Time: 46 minutes
Price: $4.00 per 35
Manual for Interpreting either Elementary or Intermediate $.25 each

Machine-scoring Edition, Forms AM or BM
Elementary
Grades: 4-7
Time: 48 minutes

Price: $4.00 per 35
Machine-Scoring Answer Sheets, $1.80 per 35
Machine-Scoring Keys, $.80 per set

Intermediate
Grades: 7-10
Time: 46 minutes
Price: $5.00 per 35
Machine-Scoring Answer Sheets, $1.80 per 35
Machine-Scoring Keys, $.80 per set

IOWA PRIMARY LANGUAGE TEST

A group of tests designed for the measurement of eight specific language abilities in grades 1, 2 and 3. The Examiner's Manual makes possible the administration of the test as Form A or Form B using the same record booklet. Pupil's Record Booklets and one copy of each form of the Answer Key are in the package.

Price: Test booklets $1.25 per 25
Machine-scoring Answer Sheets, $1.80 per 35
Extra Answer Keys, per set $.05

NATIONAL ACHIEVEMENT TESTS IN ENGLISH, FORMS A or B

Intermediate: This test covers both the essential elements and also important new, practical phases of English instruction. Of special interest are the questions dealing with the pupil's ability to express his ideas.

Grades: 3-8
Time: 40 minutes
Price: $2.20 per 25

High School Level: This test measures knowledge and skill related to: word usage, skill in the use of punctuation, vocabulary, ability to select correct, sensible sentences, ability to identify or express ideas, and ability to identify or express feeling. Includes highly effective methods of testing powers of language usage. The emphasis is placed upon power of self-expression and judgment.

Grades: 7-12
Time: 40 minutes
Price: $3.00 per 25

College: This test measures ability to use correct capitalization, to punctuate correctly, skill in the use of syntax, ability to determine the correct agreement of subject and verb, skill related to sentence structure, ability to use modifiers correctly, and knowledge of language principles.

Time: 45 minutes
Price: $3.25 per 25

NATIONAL ACHIEVEMENT TEST IN LITERATURE, FORMS A or B

This test measures appreciation of literary effects, appreciation of literary qualities, appreciation of literary moods, and knowledge of facts.

Grades: High school
Time: 40 minutes
Price: $3.15 per 25

PRESSEY ENGLISH TEST, FORMS A or C

Four sections covering capitalization, usage, punctuation, and sentence structure. Diagnostic chart enables the teacher to locate individual and class difficulties.

Grades: 5-8
Price: $1.65 per 25

TRESSLER ENGLISH MINIMUM ESSENTIALS TEST, FORM A

Covers the essentials of good usage in grammatical correctness, vocabulary, punctuation and capitalization, sentence structure, sentence sense, inflection and accent, and spelling.

Grades: 8-12
Time: 40-50 minutes
Price: $1.40 per 25

UNDERSTANDING THE SENTENCE, BOOKS I and II

Two practical workbooks that provide direct teaching of sentence skills and techniques through a variety of practice exercises. Important points of usage, grammar, and punctuation are reviewed as needed. Book I develops understanding of the basic patterns and elements of the sentence including parts of speech, capitalization, and punctuation. Book II builds upon Book I and gives particular attention to building more effective sentences through variety of sentence structure. Use of the two books in successive years of high school provides for steady progress in building sentence skills.

Grades: Designed for 9 and 10; may well be used 8-12
Price: Books $1.25 each

HANDWRITING

AYRES HANDWRITING SCALE

Grades: 2-8
Price: $.30 each

METROPOLITAN PRIMARY HANDWRITING SCALE

Grades: 1-3
Price: $.30 per copy

READING

CALIFORNIA READING TEST

These tests are identical with the corresponding parts of the complete California Achievement Test batteries. Each form is divided into two major tests, Reading Vocabulary and Reading Comprehension. The major tests are in turn divided into three or four sections, giving part scores for diagnostic purposes. May be hand- or machine-scored. Separate Answer Sheets are optional.

Primary, Forms CC or DD

Grades: 1-3 and first half of 4
Price: $2.60 per 35
Separate Scoreze pads $.08 each

Elementary, Forms CC or DD

Grades: 4-6
Price: $2.60 per 35
Separate Scoreze pads $.08
Separate Machine-Scoring Answer Sheets, $.05 each
Stencils for Hand-Scoring the Machine Answer Sheets $.25 per set
Machine-Scoring Stencils $.65 per set

Intermediate, Forms CC or DD

Grades: 7-9
Price: Same as Elementary

Advanced, Form CC

Grades: 9-14
Price: Same as Elementary

DIAGNOSTIC READING TEST: SURVEY SECTION, FORMS A or B

(By Committee on Diagnostic Reading Tests, Inc.: Frances Oralind Triggs, Robert M. Bear, Ralph Bedell, John V. McQuitty, George D. Spache, Arthur E. Traxler, and Frederick Westover.)

Rate of reading, vocabulary, and textbook comprehension are the three major reading skills measured by this Survey Section of the DRT. Two equivalent forms are available. Results help locate students who need further diagnosis—or corrective or remedial work because of retarded reading skills. In addition the test will point out those with exceptional reading skills who are not challenged sufficiently by regular class work, and who deserve extra developmental attention. May be either hand- or machine-scored.

Grades: 7-college freshman
Time: 45 minutes
Price: Booklets, $.30 each
Answer Sheets, $.05 each
Directions for Administering, $.25 each
Scoring Stencils, $.25 each

DURRELL ANALYSIS OF READING DIFFICULTY

A standard procedure for analyzing reading ability. The material consists of the wire-bound *Reading Paragraphs,* a series of standardized word lists and reading selections, together with a quick exposure device (Tachistoscope) with accompanying test cards, and carefully worked out *Individual Record Blank* for recording results in a systematic way.

Difficulties in the following phases of reading are analyzed in detail: silent and oral reading, word analysis, phonetics, faulty pronunciation, and difficulties in writing and in spelling. *The Manual of Directions* suggests general plans for remedial teaching.

Grades: 1-6
Time: 30-45 minutes per pupil
Price: Individual Record Blanks, $3.35 per 35
Reading Paragraphs, $1.30 per copy
Tachistoscope and cards, $1.00 per set
Blank cards for Tachistoscope, $1.20 per 30
Manual of Directions, $.35 each

DURRELL-SULLIVAN READING ACHIEVEMENT TEST, FORM A

This is a group test parallel to the *Capacity Test,* and standardized on the same reading achievement. It comprises the following sub-tests: *Test 1:* Word Meaning; *Test 2:* Paragraph Meaning; and optional test of Spelling and Written Recall.

Intermediate Test
Grades: 3-6
Time: 30-35 minutes
Price: $2.95 per 35

DURRELL-SULLIVAN READING CAPACITY TEST, FORM A

This is a group test which uses the child's ability to understand spoken language as a measure of his capacity to read. It is composed entirely of pictures and consists of two sub-tests: Test 1, Word Meaning, measuring understanding of spoken words, and Test 2, Paragraph Meaning, measuring comprehension of spoken discourse.

Intermediate Test
Grades: 3-6
Time: 30-40 minutes
Price: $2.45 per 35

DURRELL-SULLIVAN READING CAPACITY AND ACHIEVEMENT TEST, FORM A

This Primary Test, covering both capacity and achievement, is made up of the easier portions of the Intermediate Test.

Primary Test
Grades: 2.5-4.5
Time: 40-45 minutes
Price: $3.85 per 35

GATES ADVANCED PRIMARY READING TESTS

These tests are designed to meet the needs of those readers in grade 2 for whom the GATES PRIMARY READING TESTS may be too easy and of those readers in grade 3 for whom the GATES BASIC READING TESTS may be too difficult. The tests measure level and range of ability in word recognition and paragraph reading. To provide for retesting at intervals, three equivalent forms of each type are available.

Type 1: Word Recognition, Forms 1, 2, and 3

Type 2: Paragraph Reading, Forms 1, 2, and 3
Grades: Second half of grade 2 and grade 3
Time: 15 minutes for Type 1, 25 minutes for Type 2
Price: $3.00 per 100
Manual of Directions, $.25 each

GATES BASIC READING TESTS

These tests measure speed of reading and accuracy of comprehension. They include a representative sampling of various types of reading matter. Each of four different aspects in reading is measured by a separate test, Types A, B, C, and D. To provide for retesting at intervals, four equivalent forms of each type are available.

Type A: Reading to Appreciate General Significance, Forms 1, 2, 3, 4

Type B: Reading to Predict Outcome of Given Events, Forms 1, 2, 3, 4

Type C: Reading to Understand Precise Directions, Forms 1, 2, 3, 4

Type D: Reading to Note Details, Forms 1, 2, 3, 4

Grades: 3-8
Time: 6 to 8 minutes for Type A; 8 to 10 minutes each for Types B, C, and D
Price: $3.00 per 100
Manual, $.25 each

GATES-PEARDON PRACTICE EXERCISES IN READING, BOOKS III, IV, V, and VI

These booklets have as their aim the development of all-round proficiency in the four representative types of reading measured by the GATES BASIC READING TESTS. The exercises are designed to supplement the other reading experiences of children and are arranged to make the training as direct as possible. The examiner must have a Manual of Directions, the pupil should have one booklet of each of the four types, if all-round proficiency in reading is the aim.

Grades: BOOK III, 2-4, primarily for grade 3
BOOK IV, 3-5, primarily for grade 4
BOOK V, 4-6, primarily for grade 5
BOOK VI, 6-8
Types A, B, C and D are published for each booklet:
A. Reading to Appreciate the General Significance of a Selection
B. Reading to Predict the Outcome of Given Events
C. Reading to Understand Precise Directions
D. Reading to Note Details
Price: $3.50 per package of 10
Manual of Directions, $.25 each

GATES PRIMARY READING TESTS

This series of reading tests measures level and range of ability in the three most important aspects of reading at the early primary stage. Each of these aspects of reading is tested by a separate test. To provide for retesting at intervals, three equivalent forms of each type are available.

Type 1: Word Recognition, Forms 1, 2, and 3

Type 2: Sentence Reading, Forms 1, 2, and 3

Type 3: Paragraph Reading, Forms 1, 2, and 3
Grades: 1 and first half of 2
Time: 15 minutes each for Types 1 and 2, 20 minutes for Type 3
Price: $3.00 per 100
Manual, $.25 each

GATES READING READINESS TESTS

Measures the general readiness for beginning reading. Consists of the

following sub-tests: Picture Directions, Word Matching, Word-Card Matching, Rhyming, Reading Letters and Numbers.

Grades: Kindergarten and first half of 1st grade
Time: No time limit
Price: $1.40 per 25
Manual, $.25 each

GATES READING SURVEY, FORMS I or II

Designed to measure word knowledge or vocabulary, power or level of comprehension, speed of reading, and accuracy of interpretation. May be used coordinately with GATES BASIC READING TESTS.

Grades: 3-10
Price: $1.75 per 25

GILMORE ORAL READING TEST, FORMS A or B

An individual test for the measurement and analysis of oral reading ability as regards accuracy, comprehension and rate. Analysis of pupil performance is facilitated by a summary check-list of difficulties and records of errors for the individual paragraphs. The Reading Paragraphs and Manual of Directions are needed by each person who administers the test.

Grades: 1-8
Time: No time limit; usually takes 15 to 20 minutes
Price: Record Blanks, $1.75 per 35
Reading Paragraphs, $1.60 each
Manuals, $.35 each

GRAY STANDARDIZED ORAL READING CHECK TESTS, SET III

A detailed analysis of the individual difficulties in oral reading may be obtained by the use of these tests. An aid to determining the nature of a pupil's difficulties and the character of training necessary to develop oral reading ability.

Grades: 4-6
Price: $2.50 per packet of 100 tests (20 of each of the five tests in set, 20 individual record sheets and 4 direction sheets).

GRAY STANDARDIZED ORAL READING PARAGRAPHS

This test is usable in all grades after the children have attained a preliminary vocabulary. Ability is checked in terms of rate of reading and in number of errors made. Children are tested individually.

Grades: 1-8
Price: $1.40 per 25

IOWA SILENT READING TESTS: NEW EDITION

A widely used battery of tests measuring several skills indispensable to effective reading of the work-study type. They are analytical, measuring rate of reading, comprehension, word meaning, and ability to use skills in locating information. The Advanced Forms may be machine-scored.

Elementary, Forms AM or BM

Grades: 4-8
Time: 49 minutes
Price: $2.95 per 35

Advanced, Forms AM, BM, CM or DM

Grades: High school and college
Time: 45 minutes
Price: $4.00 per 35
Machine-scoring Answer Sheets, $1.80 per 35
Machine-scoring Keys, $.60 per set

McCALL-CRABBS STANDARD TEST LESSONS IN READING, BOOKS A, B, C, D, E

These lessons are published in five booklets, each one consisting of 78 lessons comprising selections with questions of the multiple-choice type. They help develop a rate of speed and power of comprehension exceeding that yielded by ordinary methods of teaching silent reading. They embody in practical form scientific principles of teaching speed and comprehension in silent reading, and can be used by any teacher without supervision or special training. They help pupils to comprehend varied kinds of reading material and increase enjoyment of reading. Testing and teaching at the same time, they indicate a pupil's reading ability in relation to grade and age, and show his individual progress. They are scored by the pupils themselves and provide a cumulative record for each pupil.

Grades: BOOK A, 2-4
BOOK B, 3-5
BOOK C, 4-6
BOOK D, 5-7
BOOK E, 7-12
Price: Books, $.45 each
Additional Record Cards, $.04 each
Manual, $.30 each

METROPOLITAN ACHIEVEMENT READING TESTS

These tests cover comprehension and vocabulary or word recognition.

Elementary, Forms R or S

Grades: 3 and 4
Time: 45 minutes
Price: $2.65 per 35

Intermediate, Forms R, S, or T

Grades: 5 and 6
Time: 45 minutes
Price: $2.30 per 35

Advanced, Forms R or S

Grades: 7, 8, and first half of 9
Time: 45 minutes
Price: $2.30 per 35

MURPHY-DURRELL DIAGNOSTIC READING READINESS TEST

A measure of three abilities known to be of crucial importance in the development of early reading skill—auditory discrimination, visual discrimination, and learning rate.

Grades: Early first grade
Time: Tests 1 and 2, about one hour; Test 3, about 20 minutes of group instruction and brief individual testing at three different times subsequent to the group instruction.
Price: $2.50 per 35
Set of 13 Flash Cards, $1.60

REILLEY PRIMARY READING TEST, FORM A

This test measures achievement in the four major phases of the development of reading with understanding: word recognition, word meaning, sentence meaning, and paragraph meaning. The total score will represent accurately the level of reading achievement and the part scores will indicate group strengths and weaknesses.

Grades: End of 1 and beginning of 2
Price: $1.50 per 25

ROW-PETERSON READING ACHIEVEMENT TESTS—ALICE AND JERRY SERIES

These tests are based on material contained in the ALICE AND JERRY testbooks, and are used to measure the pupil's achievement at the termination of the course in which the books are used.

Preprimer Test: is used in connection with the preprimers *Skip Along, Under the Sky, Open the Door,* and *New High on a Hill.*
Price: $1.20 per 25

Basic Primer: is used with *New Day In and Day Out.*
Price: $1.20 per 25

First Reader Achievement Test: is used with *New Round About.*
Price: $1.20 per 25

Second Reader Achievement Test: is used with *New Friendly Village.*
Price: $1.20 per 25

Third Reader Achievement Test: is used with *New If I Were Going.*
Price: $1.20 per 25

SANGREN-WOODY READING TEST, FORMS A or B

A measure of seven aspects of silent reading ability that are generally accepted as important components of silent reading instruction.
Grades: 4-8
Time: 27 minutes
Price: $3.00 per 35

SCHRAMMEL-GRAY HIGH SCHOOL AND COLLEGE READING TESTS, FORMS A or B

The three scores of this test help the teacher analyze each student's reading ability. The *gross-comprehension* score consists of the total items answered correctly on the paragraphs read. The *rate score* is a measure of the number of words read per minute for the testing period. The *comprehension-efficiency* score is a ratio between the other two scores and is indicative of efficiency in reading based on the quantity read.
Grades: 7-12 and college
Time: 25 minutes
Price: $2.25 per 25

STANFORD ACHIEVEMENT READING TESTS

These tests cover comprehension and vocabulary or word meaning.

Elementary, Form J
Grades: 3-4
Time: 35 minutes
Price: $2.00 per 35

Intermediate, Forms J or K
Grades: 5-6
Time: 40 minutes
Price: $2.00 per 35

Advanced, Form J

Grades: 7-9
Time: 40 minutes
Price: $2.00 per 35

STEVENS READING READINESS TEST

A test to identify those children who are ready to learn to read. It affords an analysis of a child's perceptual and recall abilities. Part I may be given to small groups; Parts II and III must be given to each pupil individually.

Grades: Second-semester kindergarten and beginning first grade
Time: About 20 minutes per child
Price: $4.10 per 35

THORNDIKE-LORGE READING TESTS, FORMS A or B

The tests measure the following silent reading abilities: knowledge of meanings of words and phrases, knowledge of construction and idioms, ability to infer meaning from content, ability to keep in mind parts of a sentence or paragraph for use in comprehension of the whole, ability to use sentence and paragraph comprehension for informational and aesthetic purposes, ability to read fast enough for specific and total understanding without undue expenditure of time.

Grades: 7-9
Price: $1.95 per 25

TRAXLER HIGH SCHOOL READING TEST, FORMS A or B

This test measures in one booklet: rate of reading, story comprehension, and finding the main ideas in paragraphs. Manual of Directions must be purchased separately.

Grades: 10, 11, and 12
Time: 40 minutes
Price: $2.20 per 25
Manual of Directions, $.25 each

TRAXLER SILENT READING TEST, FORMS 1, 2, 3 or 4

This test measures four phases of the pupil's reading ability: power of comprehension, essential ideas, word meaning, and rate of reading. A Teacher's Handbook for guidance in identifying the pupil's reading needs may be secured.

Grades: 7-10
Price: $2.20 per 25
Teacher's handbook, $.25 each

WILLIAMS READING TEST, FORM A

This is a classification test for instruction in reading, designed to discover the differences in comprehension and vocabulary due to differences in mental ability. The pupils are classified on their power to understand the relations as well as the main thought units in what they are reading.

Grades: 4-9
Price: $1.20 per 25

For Teachers of Reading

BAKER'S "IN BEHALF OF BETTER READING"

Contains many sound and practical suggestions for work with poor readers. In simple non-technical language, it discusses the problem of the retarded reader and emphasizes the remedial teaching on the pre-primer, primer, elementary and secondary school levels.

Grades: For use with pupils in grades 1-6
Price: $.75 a copy
Chart of "Educational Disability in Reading," wall size, $.40 each

SPELLING

AYER STANDARDIZED SPELLING TEST

This test checks the level of spelling ability in a class or in an entire school; reveals weak and strong spellers so that individualized programs can be planned, and measures individual or group progress at the end of a set period of instruction.

Grades: High school
Price: $1.00 per 40

BUCKINGHAM EXTENSION OF THE AYRES SPELLING SCALE

A scale from which to select words for testing purposes. Obtainable in pamphlet form to be placed in the hands of each pupil for a study of the list of words, or on one large sheet for group testing.

Grades: 2-9
Price: $.30 each for either the pamphlet or the large sheet

MORRISON-McCALL SPELLING SCALE

A booklet containing eight spelling lists of fifty words each, ranging from easy to difficult. The same lists may be used in all grades.

Grades: 2-8
Price: $.25 per copy

VOCABULARY

DUROST-CENTER WORD MASTERY TEST—FORM AM

A test designed to provide a measure of general vocabulary level based upon a carefully selected, functional vocabulary list, and to measure the extent to which the student is able to learn the meanings of unknown words by seeing them in typical context situations. The test is in two parts. Part 1 is a multiple-choice vocabulary test; Part 2 presents the same words used in meaningful sentences. A comparison of a student's scores on the two parts provides a measure of his ability to learn meanings from context. Percentile norms by grade. Separate answer sheets are required for each pupil.

Grades: 9-12
Time: 25 minutes, first testing period
35 minutes, second testing period
Price: $3.70 per 35
Answer Sheets, $1.35 per 35

GATES READING SURVEY TEST FOR GRADES 3 to 10.
(See READING)

INGLIS TESTS IN ENGLISH VOCABULARY

These tests are issued in two divisions, upper and lower.

Lower Division, Forms X or Y
Grades: 6-10
Price: $2.30 per 30

Upper Division: Forms A or B
Grades: High school and college
Price: $2.75 per 30

MICHIGAN VOCABULARY PROFILE TEST, FORMS AM or BM

The eight subtests cover human relations, commerce, government, physical sciences, biological sciences, mathematics, fine arts, and sports. The profile of knowledge in the various areas which the test affords is important for guidance and counseling purposes, offering the necessary complement to measures of interest in the various areas. Can be scored in the booklet, or separate answer sheets may be purchased and the booklets reused. Separate answer sheets required only for machine-scoring. machine-scoring.

Grades: High school, college, and adults
Time: 50 minutes
Price: Test Booklets, $3.40 per 35
Answer sheets, $1.35 per 35
Machine-Scoring Keys, $.40 per set

READING VOCABULARY FOR PRIMARY GRADES (Gates)

This is a book for teachers giving a list of 1811 words which have been selected as highly suitable for use in all forms of reading material in grades 1, 2, and 3. The words are arranged in two forms: first in an alphabetical list of the 1811 words followed by a rating of 1, 2, 3, or 4. This rating indicates whether the word falls within the first, second, third, or fourth 500 on the basis of importance as determined by application of the criteria mentioned in the introduction of the booklet. Following this list appears an alphabetical list of all the words in the first 500, a second list of the words in the second 500, a third list of the words in the third 500, and a fourth list containing the 311 words falling within the fourth 500.

Grades: For use in 1, 2 and 3
Price: $.50 per copy

FOREIGN LANGUAGES

COOPERATIVE FRENCH TEST, ELEMENTARY FORM

This test consists of three parts: Reading, Vocabulary, and Grammar. Separate answer sheets may be used, but are not required.

Grades: Students in the first two years of high school French or the first year of college study.
Time: 40 minutes
Price: $2.60 per 25
Answer Sheets, $1.00 per 25
Scoring Stencil, $.25

LURIA-ORLEANS MODERN LANGUAGE PROGNOSIS TEST, FORM A

A measure of aptitude for learning modern languages, to be used in screening before admission and in the formation of homogeneous classes or groups. Abilities requisite for learning a language are covered by eleven subtests, based on short language lessons.

Grades: 7-12
Time: 76 minutes; over-all time 85 minutes
Price: $3.00 per 35

ORLEANS-SOLOMON LATIN PROGNOSIS TEST, FORM A

Provides a means of determining before study is begun what success students may be expected to have in Latin. Consists of several simple Latin lessons with a test on each lesson. Gives a basis for advising high school students as to whether they should study Latin, or repeat it, if they have failed. May also be used for the classification of students entering Latin classes.

Grades: High school, before beginning Latin instruction
Time: 50 minutes; over-all time approximately an hour
Price: $3.00 per 35

GEOGRAPHY

NATIONAL ACHIEVEMENT TESTS IN GEOGRAPHY, FORMS A or B

This test measures: understanding of geographic concepts, knowledge of products (U.S. and World), understanding of the values of products, knowledge of the uses of products and instruments, knowledge of important locations, appreciation of economic and human relations, ability to understand life situations, and miscellaneous problems.

Grades: 6-8
Time: 35 minutes
Price: $2.50 per 25

PUBLIC SCHOOL ACHIEVEMENT TEST IN GEOGRAPHY, FORM 1

This test has been used in nation-wide testing programs, is easy to administer and score.

Grades: 4-8
Price: $1.10 per 25

HEALTH

KILANDER HEALTH KNOWLEDGE TEST, FORM AM

A measure of knowledge and understanding of matters pertaining to health. Although intended primarily as a measure of achievement in a and sanitation, nutrition, safety and first aid, and mental and emotional health. Although intended primarily as a measure of achievement in a course in health instruction, it may be used also to measure health knowledge resulting from other courses or obtained incidentally. Answer sheets are required.

Grades: 9-12
Time: 40 minutes
Price: $3.15 per 35
Answer Sheets, $1.15 per 35

HISTORY

COOPERATIVE AMERICAN HISTORY TEST

This test samples the wide range of material covered in secondary

school and college survey courses in American history. On the secondary school level it is particularly suitable for college preparatory students. It measures primarily the student's knowledge of basic facts and trends in the economic, social, and political development of the United States. Separate answer sheets optional.

Grades: High school and elementary college classes in American History
Price: $2.85 per 25
Answer Sheets, $1.00 per 25
Scoring Stencil, $.25

CRARY AMERICAN HISTORY TEST, FORM AM

An end-of-year test which measures not only knowledge of important historical facts, such as dates, laws, treaties, etc., but also understanding of historical processes, ability to interpret historical data, map skills, and reasoning by inference. Important aspects of political, social, economic, diplomatic, military, and cultural history are covered. Separate Answer Sheets are required for each pupil.

Grades: End-of-course test
Time: 40 minutes
Price: $3.15 per 35
Answer Sheets, $1.10 per 35

CUMMINGS WORLD HISTORY TEST, FORM AM

A measure not only of factual knowledge of world history, but also of understanding of the great movements and social trends that have taken place in the development of civilization. The first 45 items are factual questions on major historical events, dates, places, and leaders. The remaining 35 items cover important aspects of the history of ancient times, medieval and modern Europe, and the two World Wars. Separate Answer Sheets are required for each pupil.

Grades: End of a typical World History Course
Time: 40 minutes
Price: $3.70 per 35
Answer Sheets, $1.10 per 35

INTELLIGENCE TESTS

A.C.E. PSYCHOLOGICAL EXAMINATION FOR HIGH SCHOOL STUDENTS

This test is valuable for indicating a student's mental abilities and the caliber of school achievement that might be expected from him. The part scores have immediate value in both academic and vocational guidance, and the results are meaningful to colleges when presented as a part of the applicant's high school record.

The examination has two distinct parts: Linguistic (yielding the L-score) and Quantitative (yielding the Q-score). The L-score is indicative of ability to succeed in those fields which require proficiency with language and facility of expression. The Q-score measures ability to deal with the type of material covered in technical curricula. Answer sheets are required.

Grades: 9-12
Time: 55 minutes
Price: $2.85 per 25
Answer Sheets, $1.10 per 25
Scoring Stencils, $.35

CALIFORNIA TEST OF MENTAL MATURITY—1951 EDITION (LANGUAGE AND NON-LANGUAGE)

This test is made up of several sub-tests arranged under the headings of memory, spatial relations, logical reasoning, numerical reasoning, and verbal concepts. The test yields both mental ages and intelligence quotients for the language and non-language sections and for the total test. Answer sheets are optional.

Pre-Primary Series
Grades: Kindergarten-1
Time: 2 periods of 45 minutes each
Price: $5.00 per 35

Primary Series
Grades: 1-3
Time: Same as above
Price: Same as above

Elementary Series
Grades: 4-8
Time: Same as above
Price: Same as above
Scoreze Answer Pads, $.08 each
IBM Answer Sheets, $.05 each
Hand-scoring Stencils, $.45 a set
Machine-scoring Stencils, $.65 a set

Intermediate Series
Grades: 7-10, adult
Time: Same as above
Price: Same as above

Advanced Series
Grades: 9-superior, adult
Time: Same as above
Price: Same as above

CALIFORNIA SHORT-FORM TEST OF MENTAL MATURITY—1950 EDITION

The seven sub-tests gives scores in four components, namely: spatial relations, logical reasoning, numerical reasoning, and verbal concepts. The test yields both mental ages and intelligence quotients for the language and non-language sections and for the total test. Answer sheets are optional.

Pre-Primary Series
Grades: Kindergarten-1
Time: 50 minutes
Price: $3.00 per 35

Primary Series
Grades: 1-3
Time: Same as above
Price: Same as above

Elementary Series
Grades: 4-8
Time: Same as above
Price: Same as above
Scoreze Answer Pads, $.08
IBM Answer Sheets, $.05 each
Hand-scoring Stencils, $.25 each
Machine-scoring Stencils, $.45 each

Intermediate Series
Grades: 7-10, adult
Time: Same as above
Price: Same as above

Advanced Series
Grades: 9-superior, adult
Time: Same as above
Price: Same as above

DAVIS-EELLS TEST OF GENERAL INTELLIGENCE OR PROBLEM-SOLVING ABILITY

A group test of general intelligence in which intelligence is defined

specifically in terms of problem-solving ability in realistic problem areas. Material is presented entirely verbally. There are no reading requirements. The method of administering stresses a "game" rather than a "test" atmosphere. The Manual, which comes separately, is designed particularly for directors of research and supervisory personnel.

Primary Test, Form A
Grades: 1 and 2
Time: Grade 1, two 30-minute periods
Grade 2, three 30-minute periods
Price: $3.70 per 35
Manual, $.80 each

Elementary Test, Form A
Grades: 3-6
Time: Two 50-60 minute periods
Price: $4.25 per 35

DETROIT BEGINNING FIRST-GRADE INTELLIGENCE TEST, Revised, FORM A

A non-reading group intelligence test consisting of ten short sub-tests.
Grades: Beginning first grade
Time: 30-35 minutes
Price: $2.45 per 35

DETROIT ADVANCED FIRST-GRADE INTELLIGENCE TEST, FORM A

A non-reading group intelligence test.
Grades: Middle to end of first grade and beginning second grade
Time: 30-35 minutes
Price: $2.45 per 35

DETROIT KINDERGARTEN TEST, FORM A

An individually-administered intelligence test.
Grades: Beginning kindergarten
Time: 7-12 minutes
Price: $2.15 per 35

DETROIT ADVANCED INTELLIGENCE TEST, FORM V

A group of subtests to determine general intelligence. Easily scored.
Grades: 9-12 and college
Time: Approximately 45 minutes
Price: $1.95 per 25

GOODENOUGH INTELLIGENCE TEST

A non-verbal test of mental ability. Can be used either as a group or an individual test. Estimates are based on characteristics of the subject's drawing of a man. Especially useful for children with language handicaps or with unusual backgrounds. *Measurement of Intelligence by Drawing* used for administering and interpreting.

Grades: 4-10
Time: No time limit; usually completed in 10 minutes
Price: $1.35 per 35
Measurement of Intelligence by Drawing, $3.12

KUHLMANN-FINCH INTELLIGENCE TESTS

A test of general mental development comprising 8 test booklets for use in grades 1 through high school; a measure of intellectual power rather than speed. Easily scored. Booklets for grades 5 through high school are reusable if separate answer sheets are used, but the use of them is optional. Separate answer sheets are not available for Tests I, II, III, and IV. Manual contains complete directions for all grades.

Grades: 1, 2, 3, 4, 5, 6, Jr. high, Sr. high
(Test number corresponds to grade level)
Time: Five 5-minute sub-tests in each test
Price: $2.40 per 25
Hand- or machine-scoring Answer Sheets, $1.00 per 25
(Specify type desired)
Hand-scoring Stencil Key, $.25 each
Machine-scoring Stencil Key, $.50 each
Manual, $1.10

METROPOLITAN READINESS TEST, FORMS R or S

A measure of children's maturity or readiness to undertake ordinary first-grade work. The results are useful in indicating which pupils are likely to profit from formal instruction in reading, number work, etc. and which pupils will require additional training before they are ready for such work. The content is entirely pictorial

Grades: End of kindergarten and beginning of first grade.
Time: About 60 minutes
Price: $3.55 per 35

OTIS CLASSIFICATION TEST, Revised

Includes Otis Quick-Scoring Mental Ability BETA.
(See BATTERIES)

OTIS GROUP INTELLIGENCE SCALE, FORMS A or B

A measure of general mental ability.

Primary Examination: (8 sub-tests)
Grades: 1-4
Time: 40 minutes
Price: $2.55 per 35

Advanced Examination: (10 sub-tests)
Grades: 5-12 and adults
Time: 60 minutes
Price: $3.10 per 35

OTIS QUICK-SCORING MENTAL ABILITY TESTS: NEW EDITION (Short Form)

The new forms are shorter than the old forms, but yield results directly comparable to them. The *Alpha Test (Short Form)* is half verbal and half nonverbal.

Alpha Test, Form AS
Grades: 1-4
Time: 25 minutes
Price: $2.25 per 35

Beta Test, Forms EM or FM
Grades: 4-9
Time: 30 minutes
Price: $2.35 per 35
Machine-scoring Answer Sheets, $.95 per 35
Machine-scoring Keys, $.20 each

Gamma Tests, Forms EM or FM
Grades: High school and college
Time: 30 minutes
Price: $2.35 per 35
Machine-scoring Answer Sheets, $.95 per 35
Machine-scoring Keys, $.20 each

OTIS QUICK-SCORING MENTAL ABILITY TESTS

A series of group intelligence tests that give reliable results with a great saving of time in giving and scoring. They are self-administering except for the verbal test of *Alpha*. May be hand-scored. Machine-scoring answer sheets are available for *Beta* and *Gamma* tests.

Alpha Test, Forms A or B
Grades: 1-4

Time: 20 minutes
Price: $2.65 per 35

Beta Test, Forms A or B, CM or DM
Grades: 4-9
Time: 30 minutes
Price: A or B, $1.95 per 35
CM or DM, $2.35 per 35
Machine-scoring Answer Sheets for CM or DM, $.95 per 35
Machine-scoring Keys, $.20 each

Gamma Test, Forms AM or BM
Grades: High school and college
Time: 30 minutes

Price: $2.35 per 35
Machine-scoring Answer Sheets, $.95 per 35
Machine-scoring Keys, $.20 each

OTIS SELF-ADMINISTERING TESTS OF MENTAL ABILITY

Group intelligence tests that are widely used because of their ease of administering and scoring, the variety of test material, and the simple method of obtaining IQ's.

Intermediate Examination
Grades: 4-9
Time: Either a 20- or 30-minute time limit may be used
Price: $1.90 per 35

Higher Examination
Grades: 9-12 and college
Time: Either a 20- or 30-minute time limit may be used
Price: $1.90 per 35

PINTNER GENERAL ABILITY TESTS: NON-LANGUAGE SERIES

A group test of general intellectual ability that utilizes no verbal situation, measures mental functions independently of word knowledge and facility, and may be administered in pantomime without the use of language. Pantomime directions are provided for use with deaf or foreign-language-speaking children.

Intermediate Test, Forms K or L
Grades: 4-9
Time: 50 minutes
Price: $4.15 per 35
Pantomime Directions, $.25 each

PINTNER GENERAL ABILITY TESTS: VERBAL SERIES

Four batteries of mental tests that fulfill modern requirements for a complete series of group tests of general mental ability at all levels, measuring a variety of aspects of general mental ability.

Pintner-Cunningham Primary Test is entirely oral. FORMS A, B, or C
Grades: Kindergarten-2
Time: 25 minutes
Price: $2.65 per 35

Pintner-Durost Elementary Test

Scale 1, Picture Content, Forms A or B
Grades: 2-4
Time: 45 minutes
Price: $3.50 per 35

Scale 2, Reading Content, Forms A or B
Grades: 2-4
Time: 45 minutes
Price: $2.80 per 35

Pintner Intermediate Test, Forms A or B

(semi-self-administering)
Grades: 4-9
Time: 45 minutes
Price: $2.95 per 35
Answer Sheets (necessary only for machine-scoring), $1.35 per 35
Machine-scoring Keys, $.40

Pintner Advanced Test, Forms A or B

Grades: 9 and above
Time: 55 minutes
Price: $3.00 per 35; Answer Sheets (necessary only for machine-scoring), $1.35 per 35; Set of 2 Machine Keys, $.40

SRA PRIMARY MENTAL ABILITIES—for AGES 5 to 7

This battery provides scores for five basic components of intelligence: verbal-meaning, quantitative, space, perceptual speed, and motor. At some time after the 5-7 age level, numerical and reasoning abilities evolve from the quantitative ability measured by this battery. A general ability quotient comparable to the I.Q. is also provided. It is a good indicator of reading readiness, and ability to enter first grade. All problems are pictorial; all directions are oral. No reading is required.

Grades: Kindergarten-2
Time: One hour, or two half-hour periods
Price: $3.00 per 20
Manual, $.30 each

SRA PRIMARY MENTAL ABILITIES—for AGES 7 to 11

Five basic learning aptitudes are measured by this test: verbal-meaning, space, reasoning, perception, and number. A Total Score and a Total Non-Reading Score provide two evaluations of general ability. Its unique reading and non-reading tests for verbal-meaning and reasoning are especially useful in the study of reading ability and reading capacity. In general, the test provides information useful in predicting general learning rate, the kinds of school work the pupil can do easily, and the subject areas that may be difficult.

Grades: 2-6
Time: One hour, or two half-hour periods
Price: Reusable booklets with self-scoring carbon answer pad, $.50 each
Extra self-scoring carbon answer pads, $1.85 per 20
Profile Sheets, percentile ranks, $.60 per 20
Profile Sheets, age and quotient scores, $.60 per 20
Manual, $.30 each

SRA PRIMARY MENTAL ABILITIES—for AGES 11 to 17

Here is a measure of five primary mental abilities: verbal-meaning, space, reasoning, number and word-fluency. Schools using this test can convert the Total Score to a general ability quotient comparable to the I.Q. Self-interpreting profiles are provided to help teachers and counselors understand students' strengths and weaknesses. Students themselves can use the profiles to increase self-understanding, and to plan educational and vocational activities.

Form AH (Hand-scoring)

Grades: Junior and senior high school, adult
Time: 40 to 45 minutes
Price: Reusable booklets with self-scoring carbon answer pad, $.50 each
Extra self-scoring carbon answer pads, $1.85 per 20
Profiles, $.60 per 20
Manual, $.30

Form AM (Machine-scoring)

Grades: Junior and senior high school, adult
Time: 40 to 45 minutes
Price: Reusable booklets, $.50 each

Answer Sheets, $3.00 per 100
Scoring Keys, $2.25 per set of 6
Profiles, $.60 per 20
Manual, $.30

TERMAN-McNEMAR TEST OF MENTAL ABILITY, FORMS C or D

Particularly stresses verbal components of intelligence. There are seven sub-tests: Information, Synonyms, Logical Selection, Classification, Analogies, Opposites, and Best Answer. Scoring is simplified. May be hand- or machine-scored. Separate answer sheets required only for machine-scoring.

Grades: 7-12 and college freshmen
Time: 40 minutes
Price: $2.95 per 35
Answer Sheets, $1.15 per 35
Machine-Scoring Keys, $.20 per set

MATHEMATICS

ANALYTICAL SCALES OF ATTAINMENT IN ARITHMETIC

Measures separately quantitative relationships, arithmetic vocabulary, fundamental operations of arithmetic, and ability to solve problems.

Grades: 7-8
Price: $1.50 per 25

BLYTH SECOND-YEAR ALGEBRA TEST, FORM AM

Measures competence in the basic skills of algebraic facts and concepts. The 55 items include problems and exercises on symbolic expression, factoring, radicals, exponents, logarithms, simple progressions, linear and quadratic equations, and graphic methods. Answers may be recorded in the test booklet, or on separate answer sheets, and the books reused.

Grades: End of typical second-year algebra course
Time: 45 minutes
Price: $3.15 per 35
Answer sheets, $1.10 per 35

BRESLICH ALGEBRA SURVEY TEST, FORM A

Consists of six parts: Part I: Algebraic Concepts; Part II: Algebraic Processes; Part III: Solving Equations; Part IV: Problems; Part V: Fractions; Part VI: Functional Relationships.

Grades: Second semester of Algebra
Price: $1.40 per 25

BUSWELL-JOHN DIAGNOSTIC TEST FOR FUNDAMENTAL PROCESSES IN ARITHMETIC

This is not a group test, but each pupil is tested individually. The pupil does his work aloud, and this enables the teacher to discover difficulties or wrong habits in solving examples in the fundamental processes. Especially recommended for use with pupils or classes having special difficulties in arithmetic. Package contains 25 Pupil's Work Sheets, 25 Teacher's Diagnostic Charts, and one Manual of Directions.

Grades: 4-8
Time: About 20 minutes per pupil tested
Price: $1.95 per 25

COOPERATIVE ALGEBRA TEST. ELEMENTARY ALGEBRA THROUGH QUADRATICS

The problems included in this test are all multiple choice and include both formal and word types. The test is especially useful for measuring achievement at the end of the course. Separate answer sheets may be used.

Grades: High school classes in elementary algebra
Time: 40 minutes
Price: $2.60 per 25
Answer Sheets, $1.00 per 25
Scoring Stencil, $.25 each

FOUST-SCHORLING TEST OF FUNCTIONAL THINKING IN MATHEMATICS, FORMS A or B

Designed to measure ability to think in terms of the concepts and symbols of mathematics. The test is centered around these important aspects of functional thinking in mathematics: ability to recognize relationships, ability to interpret mathematical statements, and ability to express relaionships in symbolic language.

Grades: 9-12
Time: 45 minutes
Price: $2.65 per 35

IOWA ALGEBRA APTITUDE TEST

This index to pupil's ability to master algebra is now available in a quick-scoring form. Designed to be given before formal study of the subject. Gives an objective basis for advising pupils whether or not to elect algebra. May also be used for sectioning pupils. Separate answer sheets required for machine-scoring.

Time: 35 minutes
Price: $2.00 per 25

Machine-scoring Answer Sheets, $4.00 per 100
Machine-scoring Stencils, $.25 per set
Manual, $.25

IOWA PLACEMENT EXAMINATION—MATHEMATICS TRAINING

This examination is used to discover special aptitudes as well as to determine the effect of preliminary training in the field of mathematics.

Grade: High school seniors, college freshmen
Price: $6.00 per 100

LANKTON FIRST-YEAR ALGEBRA TEST

A 55 item test on the vocabulary of algebra, meaning and use of symbols, fundamental operations, formulas, equations, simple algebraic fractions, radicals, ratio, proportion, variation, graphs, trigonometric functions, and the solution of problems by the use of algebra. Separate answer sheets are required for each pupil.

Grades: End of 1st year course
Prices: $3.15 per 35
Answer Sheets, $1.10 per 35

LEE TEST OF ALGEBRAIC ABILITY

The specific uses to which the results of this test can be put are:

1. To determine whether or not a student should take algebra.
2. To aid in sectioning classes.
3. To determine various levels of ability within the class as an aid to instruction, in case conditions do not permit sectioning.
4. To discover, at the beginning of the term, pupils who are capable of doing exceptional work in algebra.
5. To provide a measure of the student's algebraic ability so that a teacher can tell whether poor work is due to lack of ability or to other factors that can be corrected.

Grades: Students beginning first-year algebra
Time: 25 minutes
Price: $1.75 per 25

METROPOLITAN ACHIEVEMENT TEST: ARITHMETIC

There are three different tests in this group. They cover both computation and problem solving.

Elementary—Form R

Grades: 3-4

Time: 75 minutes
Price: $2.30 per 35

Intermediate—Form R

Grades: 5-6
Time: 90 minutes
Price: $2.30 per 35

Advanced—Form R

Grades: 7, 8 and first half of 9
Time: 90 minutes
Price: $2.30 per 35

NATIONAL ACHIEVEMENT TEST: ARITHMETIC REASONING, FORMS A or B

This test deals with factors of judgment and reasoning beyond those of the usual test in the subject. It includes not only the standard material but also the important practical and judgment aspects of arithmetic.

Grades: 3-8
Time: 40 minutes
Price: $3.85 per 25

ORLEANS ALGEBRA PROGNOSIS TEST

The test consists of nine simple lessons, each followed by a series of questions covering algebraic principles and skills including the use of symbols, substitution of values for symbols, expression of relationships by symbols, and problem-solving. An arithmetic test and a summary test are also included. Data are presented on the extent to which scores on this test are actually predictive of success in learning first-year algebra. Detailed instructions are given for using the results for prognosis in local situations.

Grades: Before beginning algebra instruction
Time: 39 minutes; over-all administration time 45 minutes
Price: $3.00 per 35

ORLEANS GEOMETRY PROGNOSIS TEST

A measure of abilities necessary for success in learning geometry. The test consists of several simple lessons in geometry, each followed by a series of questions covering essential skills and principles such as understanding and use of axioms, of the vocabulary of geometry, and of geometrical notation; interpretation of statements of geometrical relations; and solution of problems. Data are presented on the extent to which scores on the test actually predict success in geometry. Detailed recommendations are given for use of the results in light of local requirements.

Grades: Before beginning geometry instruction
Time: 39 minutes; over-all administration time 45 minutes
Price: $3.55 per 35

SCHORLING-CLARK-POTTER HUNDRED PROBLEM ARITHMETIC TEST, FORMS V or W

Designed to survey computational abilities in the basic skills of arithmetic. Each of two forms contains one hundred items, arranged in five sections—Addition, Subtraction, Multiplication, Division, and Fractions, Decimals and Per Cents. Percentile norms for total score at end of first semester, grades 8-12, separately, and at end of grade 7.

Grades: 7-12
Time: 40 minutes
Price: $1.85 per 35

SEATTLE ALGEBRA TEST, FORM AM

Measures not only knowledge and understanding of the facts of beginning algebra but also the application of acquired skills and methods. The 47 items cover understanding of basic terms; fundamental processes with signed quantities; sequence of numerical operations; practical formulas; multiplication of binominals; solution of equations of the first degree by the rules of equality; solution of a set of simple simultaneous equations; algebraic representation and problems. Separate answer sheets are required. May be hand- or machine-scored.

Grades: End of first half year of algebra
Time: 40 minutes
Price: $2.60 per 35
Answer Sheets, $1.10 per 35

SEATTLE PLANE GEOMETRY TEST, FORM AM

An accurate measure of student growth and accomplishment in geometry at the end of the first half year of study. Contains 45 test items, selected on the basis of curricular validity and satisfaction of statistical requirements. Measures vocabulary of geometry, knowledge of simple geometric construction, computational skills, and ability to reason from a figure. Separate Answer Sheets are required for each pupil.

Grades: End of first half year of geometry
Time: 45 minutes
Price: $3.15 per 35
Answer Sheets, $1.10 per 35

SHAYCROFT PLANE GEOMETRY TEST, FORM AM

Part A is devoted primarily to the measurement of important basic

concepts and facts of geometry, while Part B measures application and reasoning on the basis of information. The 60 carefully selected items include questions on fundamental concepts, lines and rectilinear figures, the circle, proportions, area of polygons, and geometric reasoning. Separate Answer Sheets are required for each pupil.

Grades: End of 1st year course in plane geometry
Time: 40 minutes
Price: $3.15 per 35
Answer Sheets, $1.10 per 35

SHEA ARITHMETIC ESSENTIALS TEST, FORM A

Contains 50 exercises and problems based on the essential arithmetic skills for a particular grade level. The Class Analysis Blank enables the teacher to spot individual and class deficiencies.

Grades: 5-6
Time: Less than one class period
Price: $2.00 per 30

SNADER GENERAL MATHEMATICS TEST, FORM AM

A 65 item test measuring achievement of the important objectives of a general mathematics course of the type that includes material from the fields of algebra and informal geometry. The test samples the following areas: arithmetical concepts and processes, informal geometry, graphic representation, algebraic principles and skills, and numerical trigonometry. Measures not only computation and manipulation skills, but also application through problem situations. Separate Answer Sheets are required.

Grades: End of a one-year course in general mathematics
Time: 40 minutes
Prices: $3.70 per 35
Answer Sheets, $1.10 per 35

STANFORD ACHIEVEMENT TEST: ARITHMETIC

There are three different tests in the group. They cover both computation and problem solving.

Elementary
Grades: 3-4
Time: 55 minutes
Price: $2.00 per 35

Intermediate
Grades: 5-6
Time: 70 minutes
Price: $2.45 per 35

Advanced
Grades: 7-9
Time: 70 minutes
Price: $2.45 per 35

MUSIC

DRAKE TEST OF MUSICAL TALENT, FORMS A or B

A musical memory test adapted for use with any kind of group, with or without musical training. Measures innate musical talent and capacity of musical achievement. The booklets are needed by the examiner only. A score sheet is need for each pupil.

Price: Booklets, $.45 a copy
Manual of Directions, $.45
Answer Key, $.05 a copy
Pupil's Score Sheet, $.05 each

SEASHORE MEASURES OF MUSICAL TALENTS, SERIES A

These phonographically presented tests measure six aspects of auditory discrimination: pitch, loudness, time, timbre, rhythm, and tonal memory. Series A covers a wide range of difficulty and is used in guidance and selection testing. It consists of three double-faced records. May be hand- or machine-scored.

Grade: 5-adult
Time: One hour
Price: $15.00 per album of records, with manual and 100 record blanks
Extra Record Blanks, $1.25 per 100
IBM Answer Sheets, $2.25 per 50
Scoring Stencil, $.30 each
Manual, $.60 each

PERSONALITY AND GUIDANCE

BELL ADJUSTMENT INVENTORY: STUDENT OR ADULT FORM

Student Form is for guidance and counseling work with high school and college students. It provides a measure of four adjustments: Home, Health, Social, and Emotional. Easily scored and interpreted. A clinical tool.

Adult Form is for use with people of adult age not in school. Provides a measure of Occupational Adjustment in addition to the above mentioned four measures. Suitable for use with either sex. The high reliabilities of five types of adjustment by the one blank permits location of specific adjustment difficulties, and the comparison of one individual with another. May be hand- or machine-scored. Separate answer sheets required for machine-scoring.

Price: $2.50 per 25
Machine-scoring Answer Sheets, $1.10 per 25
Machine Key, $1.60

BELL SCHOOL INVENTORY

Locates in the minimum of time those students who are maladjusted to high school life. Easy to administer and to interpret. Requires less than 2 minutes to score. Should be given toward the end of the semester when the student is thoroughly acquainted with teachers and school conditions.

Grades: Senior high school
Price: $2.50 per 25

BERNREUTER PERSONALITY INVENTORY

By use of this blank, several aspects of personality are indicated at one time: neurotic tendency, self-sufficiency, introversion-extroversion, dominance-submission, sociability and confidence. Six different keys are required for scoring the inventory blank. May be either hand- or machine-scored. Separate answer sheets required only for machine-scoring.

Grades: High school and college
Price: $2.50 per 25
Manual, $.25
Hand-scoring Keys, $.25 set
Machine-scoring Answer Sheets, $1.10 per 25
Machine-scoring Keys, $2.70 per set
Individual Report Sheets, $1.50 per 100

CALIFORNIA TEST OF PERSONALITY

This series of group tests is designed to identify and reveal the status of certain highly important components in personality and social adjust-

ment often referred to as intangibles. Each test is designed to provide teachers, supervisors, and administrators with significant evidences of the personal and social status of individuals and groups, and to provide a means for guiding them to better adjustment. By means of carefully validated "yes-no" responses, the tests give evidence of how students feel, think, and act regarding a wide variety of situations which vitally affect them as individuals or as members of groups. The test is divided into two sections: personal adjustment and social adjustment. All levels may be scored in the test booklet; or separate hand-scoring Scoreze pads or machine-scoring Answer Sheets are available for Elementary through Secondary levels.

Primary, Form AA

Grades: Kindergarten-3
Time: 50 minutes
Price: $3.00 per 35

Elementary, Form AA

Grades: 4-8
Time: 50 minutes
Price: $3.00 per 35

Separate Scoreze Pads, $.08 each
Separate Machine-scoring Answer Sheets, $.05 each
Machine-scoring Stencils, $.75 per set

Intermediate, Form AA

Grades: 7-10
Time: 50 minutes
Price: $3.00 per 35

Separate Scoreze and Machine-scoring Answer Sheets same as Elementary

Secondary, Form AA

Grades: 9-College
Time: 50 minutes
Price: $3.00 per 35

Separate Scoreze and Machine-scoring Answer Shetes same as Elementary

GARRETSON-SYMONDS INTEREST QUESTIONNAIRE FOR HIGH SCHOOL STUDENTS

Measures high school students' interests in a wide variety of activities, helping in the choice of their high school curricular. The examiner must have directions and stencils.

Grades: High school
Price: $4.40 per 100

Examiner's Directions, $.30
Stencils, $.30

HAGGERTY-OLSON-WICKMAN BEHAVIOR RATING SCHEDULES

Standardized scales for the identification and study of the capacity of the child to adjust himself to the demands of his environment.

Grades: Kindergarten-grade 12
Price: $2.10 per 35

HESTON PERSONAL ADJUSTMENT INVENTORY

Measures six important traits of personal adjustment—analytical thinking, sociability, emotional stability, confidence, personal relations, and home satisfaction. May be hand- or machine-scored.

Grades: 9-12 and adults
Time: 45 minutes
Price: $3.75 per 35 with Hand-scoring Keys
Manual, $35
Machine-scoring Answer Sheets, $1.50per 35
Machine-scoring Key, $.40

HILDRETH PERSONALITY AND INTEREST INVENTORY

Elementary Form: is an inventory of interests, activities and characteristics. Can be used as a group test or individually. Useful in the study of problem pupils and in guidance work with parents.

Grades: 4-8
Time: One class period
Price: $.75 per 25 inventory blanks

High School Form: records personal data concerning the characteristics, ambitions, and interests of pupils. Can be used with groups or individually.

Grades: High school
Time: One class period
Price: High School List of Activities (4 pages)
Information Blank (2 pages), $1.40 per 25

MICHIGAN VOCABULARY PROFILE TEST

An aid in guidance and counseling of high school and college students, and adults. (For detailed description see VOCABULARY section under ENGLISH LANGUAGE ARTS.)

MOONEY PROBLEM CHECK LIST

These forms are widely used to help individuals express their personal problems. Valuable for group survey and research purposes as well as for appraisal of problems of individuals before or during counseling. They are self-administering, and for many counseling purposes require

no scoring. Areas covered are health and physical development, home and family, morals and religion, sex, economic security, school or occupation, social and recreational, etc. The directness of the check-list method makes it an effective fact-finder in a wide variety of situations.

Form J

Grades: Junior high school
Time: 30 minutes
Price: $1.75 per 25

Form H

Grades: High school
Time: 30 minutes
Price: $1.75 per 25

PINTNER: ASPECTS OF PERSONALITY

An inventory consisting of three sections covering ascendance-submission, extroversion-introversion, and emotionality. An aid to the teacher in discovering problem cases.

Grades: 1-9
Time: 30 minutes
Price: $2.45 per 35

SIMS SCORE CARD FOR SOCIO-ECONOMIC STATUS

Provides a simple, convenient, and objective device for ascertaining and recording the general culture, social, and economic background furnished by the homes of school children. The card permits quantitative records and statistical comparisons. Manual of Directions must be purchased separately.

Grades: 4-12
Price: $1.35 per 25
Manual, $.25

BRA YOUTH INVENTORY

This inventory helps identify problems that young people worry most about. Eight separate areas are covered: My School, Looking Ahead, About Myself, Getting Along with Others, My Home and Family, Boy Meets Girl, Health, and Things in General. In addition, a Basic Difficulty Key indicates which problems may be caused by serious personality difficulties. Booklets are reusable if separate answer sheets are used.

Grades: 7-12
Time: 40 minutes
Price: **Hand-scoring edition, Form AH**
Reusable booklets with self-scoring carbon answer pad, $.50 each

Extra self-scoring carbon answer pads, $1.85 per 20
Basic Difficulty scoring Stencils, $.60 each

Machine-scoring edition, Form AM

Reusable booklets, $.50 each
Answer Sheets, $3.00 per 100
Scoring Stencils, Set of 5, $2.60
Self-interpreting profile leaflets for junior high school or high school, $1.25 per 20
Manual, $.30 each

VINELAND SOCIAL MATURITY SCALE

Outlines performances in which the individual shows progressive capacity, under three main headings: Self-Help, Self-Direction, and Communication. An instrument for parents, teachers, counselors, social workers, clinicians, pediatricians, psychiatrists.

Range: Birthday to maturity
Price: $1.65 per 25
Manual of Directions, $1.00

SCIENCE

ANDERSON CHEMISTRY TEST, FORM AM

A measure of the extent to which students have achieved the important objectives of a high school course in chemistry. Contains 80 test items, selected on the basis of curricular validity and satisfaction of statistical requirements. Topics included are: chemical changes; solutions, elements, compounds; symbols, equations, problems; atomic structure; ionization; organic chemistry; applications.

The test is divided into the following parts: Understanding of facts and concepts; understanding and application of functional principles; understanding and application of the elements of the scientific method and the ability to use the basic skills in chemistry. Answer sheets are required. May be hand- or machine-scored.

Grades: End of 1st year course
Time: 40 minutes
Price: $3.70 per 35
Answer Sheets, $1.10 per 35

DUNNING PHYSICS TEST, FORM AM

A measure of knowledge of basic facts, principles, and laws, as well as of understanding of physics. The fields covered include mechanics, heat, sound, light, electricity, and modern physics. Answer sheets are required. May be hand- or machine-scored.

Grades: End of 1st year course in physics

Time: 45 minutes
Price: $3.70 per 35
Answer Sheets, $1.10 per 35

NELSON BIOLOGY TEST, FORM AM

Measures knowledge and understanding of biological facts, concepts, and principles; ability to recognize cause-effect relationships; and ability to apply what has been learned in the appraisal of a life situation. Based on criteria presented in the 31st, 34th and 46th Yearbooks of the National Society for the Study of Education as well as leading courses of study and teacher guides for the most widely used textbooks. Answer sheets are required. May be hand- or machine-scored.

Grades: End of a typical high school biology course
Time: 40 minutes
Price: $3.70 per 35
Answer Sheets, $1.10 per 35

READ GENERAL SCIENCE TEST, FORM AM

A measure of knowledge and understanding of the basic facts and principles of the physical and biological sciences, and their applications in problem-solving situations. The test comprises 75 test items. Topics covered are: air, water, heat, light, sound, work and machines, magnetism and electricity; bacteria, the human body, nutrition, disease and health, conservation, plant life; chemistry of familiar articles; weather and climate, communication, transportation, geology, astronomy, space; scientific method. Answer Sheets are required. May be hand- or machine-scored.

Grades: End of high school general science course.
Time: 40 minutes
Price: $3.70 per 35
Answer Sheets, $1.10 per 35

STUDY SKILLS

SPITZER STUDY SKILLS TEST

A measure of mastery of the basic skills required for effective study. The test measures five important work-study skills through the following sub-tests: Using the Dictionary; Using the Index; Knowledge of Sources of Information; Understanding Graphs, Maps, and Tables; and Organization of Facts in Note Taking. Results of each subtest are sufficiently reliable to be useful for diagnostic purposes. Answer sheets are required for each pupil tested. May be hand- or machine-scored.

Grades: 9-13
Time: Tests 1-4, two class periods, Test 5, 35 minutes
Price: $4.65 per 35
Answer Sheets, $1.35 per 35

AIDS TO SCHOOL ADMINISTRATORS

ALMY-SORENSON RATING SCALES FOR TEACHERS

Provides for the rating of 20 characteristics most important for teaching success: resourcefulness, enthusiasm, leadership, cooperation, trustworthiness, honesty, fairness, sympathy, tact, patience, courteousness, love of children, progressiveness, poise, kindness, originality, good humor, helpfulness, promptness, and foresight. Scale is easy to use. Supervisors, principals, city superintendents, presidents of teachers' colleges, professors of education, and teachers' college teachers assisted in the preparation of this scale.

Price: $1.35 per 25

ILLINOIS OPINION INVENTORIES

Comprehensive inventories of parent and pupil opinions toward their schools. These questionnaires are intended to help the school administrator obtain dependable information on the attitudes of these groups that will be helpful in public relations, personnel, and other aspects of the school's program. Their administration alone may improve morale by affording an opportunity for expression of opinion.

Inventory of Parent Opinion
Time: Untimed; usual time 20-25 minutes
Price: $2.55 per 35

Inventory of Pupil Opinion High school students
Time: Untimed; usual time 20-25 minutes
Price: $2.10 per 35

PRESSEY SENIOR CLASSIFICATION TEST

These tests are intended for comparing classes, schools, or other groups as to general ability, and for first investigation regarding accuracy of grade or section placement of the individual child.

Grades: 7-12
Price: $1.40 per 25

STANFORD EDUCATIONAL APTITUDES TEST

A comparative measure of special abilities for teaching, administration, or educational research, offering reliable estimates of the field in which one may do his best work.

Grade: Adult
Price: $1.20 per 10

Index

A.C.E. Psychological Examination for High School Students 41
Almy-Sorenson Rating Scale for Teachers 62
Analytical Scales of Attainment in Arithmetic 49
Anderson Chemistry 60
Ayer Standardized Spelling List 36
Ayres Handwriting Scale 26
Baker: In Behalf of Better Readers 36
Barrett-Ryan-Schrammel English 23
Bell Adjustment Inventory—Adult Form 56
Bell Adjustment Inventory—Student Form 56
Bell School Inventory 56
Bernreuter Personality Inventory 56
Blyth Second Year Algebra 49
Breslich Algebra Survey 49
Buchingham Extension of Ayres Spelling Scale 36
Buswell-John Diagnostic Test for Fundamental Processes in Arithmetic 50
California Achievement Batteries 15
California Reading 27
California Tests of Mental Maturity 41
California Tests of Personality 56
Cooperative American History 39
Cooperative Elementary Algebra 50
Cooperative English 24
Cooperative French 38
Crary American History 40
Cummings World History 40
Davis-Eells Games: Test of General Intelligence or Problem-Solving Ability 42
Detroit Advanced First Grade Intelligence 43
Detroit Advanced Intelligence 43
Detroit Beginning First Grade Intelligence 43
Detroit Clerical Aptitude Examination 21
Detroit General Aptitudes Examination 21
Detroit Kindergarten 43
Detroit Mechanical Aptitude Examination 21
Diagnostic Reading Test: Survey Section 27

Differential Aptitude 22
Drake Test of Musical Talent 55
Dunning Physics 60
Durost-Center Word Mastery 37
Durrell Analysis of Reading Difficulty 28
Durrell-Sullivan Reading Achievement 28
Durrell-Sullivan Reading Capacity 28
Durrell-Sullivan Reading Capacity and Achievement 29
Essential High School Content Battery 15
Foust-Schorling Test in Functional Thinking in Mathematics 50
Garretson-Symonds Interest Questionnaire for High School Students 57
Gates Advanced Primary Reading 29
Gates Basic Reading 29
Gates-Peardon Practice Exercises in Reading 30
Gates Primary Reading 30
Gates Reading Readiness 30
Gates Reading Survey 31
Gates Reading Vocabulary for Primary Grades 38
Gilmore Oral Reading 31
Goodeough Intelligence 44
Gray Oral Reading Check 31
Gray Standardized Oral Reading Paragraphs 31
Gray-Votaw-Rogers Achievement 16
Haggerty-Olson-Wickham Behavior Rating Scales 58
Heston Personal Adjustment Inventory 58
Hildreth Personality and Interest Inventory 58
Illinois Opinion Inventories 62
Inglis Tests in English Vocabulary 37
Iowa Algebra Aptitude 50
Iowa High School Content Examination 16
Iowa Language Abilities 24
Iowa Placement Examination in Mathematics Training 51
Iowa Primary Language 25
Iowa Silent Reading 32
Kilander Health Knowledge 39
Kuder Preference Record 22
Kulhmann-Finch Intelligence 44
Lankton First Year Algebra 51

Lee Test of Algebraic Ability 51
Luria-Orleans Modern Language Prognosis 38
McCall-Crabbs Standard Test Lessons in Reading 32
Metropolitan Achievement Batteries 17
Meier Art Judgment 23
Metropolitan Arithmetic 51
Metropolitan Primary Handwriting Scale 26
Metropolitan Reading 33
Metropolitan Readiness 44
Michigan Vocabulary Profile 37
Mooney Problem Check List 58
Morrison-McCall Spelling Scale 36
Murphy-Durrell Diagnostic Reading Readiness 33
Myers-Ruch High School Progress 18
National Achievement: Arithmetic Reasoning 52
National Achievement in English 25
National Achievement in Geography 39
National Achievement in Literature 26
Nelson Biology 61
Orleans Algebra Prognosis 52
Orleans Geometry Prognosis 52
Orleans-Solomon Latin Prognosis 38
Otis Classification 19
Otis Group Intelligence Scale 45
Otis Quick-Scoring Mental Ability 45
Otis Self-Administering Tests of Mental Ability 46
Pintner Aspects of Personality 59
Pintner-Cunningham Primary .....
Pintner-Durost General Ability .....
Pintner General Ability: Non-Language Series 46
Pintner General Ability: Verbal Series 47
Pressey English 26
Pressey Senior Classification 63
Primary Mental Abilities (SRA) 47
Public School Achievement Test in Geography 39
Read General Science 61
Reilley Primary Reading 33
Row-Peterson Reading Achievement: Alice and Jerry Series 33

Sangren-Woody Reading 34
Schorling-Clark-Potter Hundred Problem Arithmetic 53
Schrammel-Gray Reading 34
Seashore Measures of Musical Talent 55
Seattle Algebra 53
Seattle Plane Geometry 53
Shaycroft Plane Geometry 53
Shea Arithmetic Essential 54
Sims Score Card for Socio-Economic Status 59
Snader General Mathematics 54
Spitzer Study Skills 62
SRA Primary Mental Abilities 47
SRA Youth Inventory 59
Stanford Educational Aptitudes 63
Stanford Achievement Batteries 19
Stanford Arithmetic 54
Stanford Reading 34
Stenquist Mechanical Aptitude 23
Stevens Reading Readiness 35
Understanding the Sentence 26
Terman-McNemar Test of Ability 49
Thorndike-Lorge Reading 35
Traxler High School Reading 35
Traxler Silent Reading 35
Tressler English Minimum Essentials 26
Vineland Social Maturity Scale 60
Williams Reading 36
Youth Inventory (SRA) 59

UNIVERSITY OF NORTH CAROLINA

EXTENSION BULLETIN

VOL. XXXIV March, 1955 NO. 4

CORRESPONDENCE INSTRUCTION

ANNOUNCEMENTS OF THE BUREAU OF CORRESPONDENCE INSTRUCTION

1955-1957

Published four times a year, September, November, January, and March, by the University of North Carolina Press. Entered as second-class matter October 19, 1921, Chapel Hill, N. C.

EXTENSION BULLETINS

Vol. XXVI, No. 1 *University Extension in Action.* By Russell M. Grumman. Price $1.00.

Vol. XXVIII, No. 3 *Lectures in the Humanities.* Fourth Series. Price 50c.

Vol. XXIX, No. 2 *Building World Peace in the Atomic Age: What Are the Responsibilities of the United States in the United Nations and in the Atlantic Pact?* Peace Handbook. Compiled by E. R. Rankin. Price 50c.

Vol. XXIX, No. 3 *Lectures in the Humanities.* Fifth Series. Price 50c.

Vol. XXX, No. 1 *Lectures in the Humanities.* Sixth Series. Price 50c.

Vol. XXXI, No. 2 *Building World Peace: What Is the Responsibility of the United States in the Light of Communist Aggression?* Peace Handbook. Compiled by E. R. Rankin. Price 50c.

Vol. XXXI, No. 3 *Lectures in the Humanities.* Seventh Series. Price 50c.

Vol. XXXI, No. 4 *Program Services.* Free.

Vol. XXXII, No. 2 *Building World Peace: What Have Been the Achievements and What Are the Prospects of the United Nations?* Peace Handbook. Compiled by E. R. Rankin. Price 50c.

Vol. XXXII, No. 3 *Lectures in the Humanities.* Eighth Series. Price 50c.

Vol. XXXII, No. 4 *The Strange Journey: A Demonstration Project in Adult Education in Prison.* By Richard McCleery. Price 50c.

Vol. XXXIII, No. 1 *Correspondence Instruction.* Free.

Vol. XXXIII, No. 1 Extra Edition. *Audio-Visual Aids to Schools, Colleges, Churches and Adult Study Groups.* Price 50c.

Vol. XXXIII, No. 2 *Building World Peace: How Can the United Nations Prevent Communist Aggression and Preparation for Aggression?* Peace Handbook. Compiled by E. R. Rankin. Price 50c.

Vol. XXXIII, No. 3 *Lectures in the Humanities.* Ninth Series. Price 50c.

Vol. XXXIII, No. 4 *Producing America's Outdoor Dramas.* By Samuel Selden. Price 50c.

Vol. XXXIV, No. 1 *The Role of the United Nations in the Building of World Peace.* Peace Handbook. Compiled by E. R. Rankin. Price 50c.

Vol. XXXIV, No. 2 *Lectures in the Humanities.* Tenth Series. Price 50c.

Vol. XXXIV, No. 3 *Educational Tests.* Price 50c.

MONEY ORDERS, CHECKS OR STAMPS ACCEPTED
ADDRESS: UNIVERSITY EXTENSION DIVISION
CHAPEL HILL, N. C.

UNIVERSITY OF NORTH CAROLINA
EXTENSION BULLETIN

VOL. XXXIV March, 1955 No. 4

CORRESPONDENCE INSTRUCTION

ANNOUNCEMENTS OF THE BUREAU OF CORRESPONDENCE INSTRUCTION

1955-1957

Published four times a year, September, November, January, and March, by the University of North Carolina Press. Entered as second-class matter October 19, 1921, Chapel Hill, N. C.

UNIVERSITY EXTENSION DIVISION

BUREAU OF CORRESPONDENCE INSTRUCTION

ADMINISTRATIVE STAFF

GORDON GRAY, A.B., LL.B., LL.D., *President of the University of North Carolina.*

ROBERT BURTON HOUSE, A.M., LL.D., *Chancellor of the University of North Carolina at Chapel Hill.*

RUSSELL MARVIN GRUMMAN, B.H., *Director.*

WILLIAM JOHN MCKEE, C.E., Ph.D., *Supervisor of Correspondence Instruction.*

MARY ELIZABETH HENRY, A.B., *Head of Bureau of Correspondence Instruction.*

MARY LOUISA COBB, A.B., *Associate Head of Bureau of Correspondence Instruction.*

JEAN FISHER KING, M.A., *Assistant Head of Bureau of Correspondence Instruction.*

*THE ADMINISTRATIVE BOARD

GORDON W. BLACKWELL, Ph.D., *Professor of Sociology and Director of the Institute for Research in Social Science.*

ALBERT COATES, A.B., LL.B., *Professor of Law and Director of the Institute of Government.*

NORMAN CORDON, Mus.D., *Director of the North Carolina Music Program.*

OLIVER KELLY CORNWELL, M.A., Ed.D., *Professor of Physical Education and Director of Physical Education.*

WESLEY CRITZ GEORGE, Ph.D., *Professor of Histology and Embryology.*

EARL HORACE HARTSELL, Ph.D., *Associate Professor of English and Director of the Bureau of English Extension.*

SAMUEL HUNTINGTON HOBBS, JR., Ph.D., *Professor of Rural Sociology and Research Professor in the Institute for Research in Social Science.*

ARNOLD KIMSEY KING, Ph.D., *Professor of Education and Associate Dean of the Graduate School.*

STURGIS ELLENO LEAVITT, Ph.D., Litt.D., *Kenan Professor of Spanish and Director of the Institute of Latin American Studies.*

HAROLD DIEDRICH MEYER, A.M., LL.D., R.S.D., L.H.D., *Professor of Sociology and Director of the All-University Division of Recreation.*

CHARLES FREMONT MILNER, A.M. in Education, *Associate Director of the Extension Division and Professor of Education in Extension.*

GUY BERRYMAN PHILLIPS, M.A., Litt.D., *Professor of Education and Director of Summer Session.*

SAMUEL SELDEN, A.B., Litt.D., *Professor of Dramatic Art and Director of The Carolina Playmakers.*

CORYDON PERRY SPRUILL, A.B., B.Litt. (Oxon.), *Dean of the General College and Chairman of the Committee on Instructional Personnel.*

---

* The Chancellor, the Director of Admissions and the Dean of Students are ex officio members of the Board.

Louis Round Wilson, Ph.D., Litt.D., LL.D., L.H.D., *Professor of Library Science and Administration.*

Rex Shelton Winslow, Ph.D., *Professor of Economics and Director of the Bureau of Business Services and Research.*

Harry DeMerle Wolf, Ph.D., *Professor of Economics and Director of the Institute of Industrial Relations.*

Earl Wynn, M.S., *Professor of Radio, Television and Motion Pictures and Chairman of the Department of Radio, Television and Motion Pictures.*

CORRESPONDENCE INSTRUCTORS

Elie Maynard Adams, Ph.D., *Associate Professor of Philosophy.*

Raymond William Adams, Ph.D., *Professor of English.*

*Lillie Hall Antonakos, Ph.D., *English.*

William Joseph Barnhart, A.M., *Instructor in English.*

Ernest A. Thomas Barth, M.A., *Part-time Instructor in Sociology.*

Roger Evans Barton, D.D.S., *Instructor in Operative Dentistry.*

David Giovanni Basile, M.A., *Assistant Professor of Geography.*

Carl S. Blyth, Ph.D., *Instructor in Physical Education.*

Edgar Thomas Brame, II, A.B., *Graduate Assistant in Art.*

John Charles Brauer, D.D.S., *Professor of Pedodontics and Dean of the School of Dentistry.*

Joseph Fremont Burket, D.D.S., *Associate Professor of Pedodontics.*

Bobby Jack Campbell, M.A., *Senior Part-time Instructor in Psychology.*

Vincent Harold DePaul Cassidy, M.A., *Fellow in History.*

Marvin Edwin Chapin, D.D.S., *Professor of Oral Surgery.*

Bertran E. Davis, M.M., *Teaching Assistant in Music.*

William Wellesley Demerritt,, D.D.S., *Professor of Pedodontics.*

*Charles Edward Eaton, A.M., *English.*

Marvin Ratledge Evans, D.D.S., *Associate Professor of Oral Diagnosis and Treatment Planning.*

John Wilfred Gallagher, D.M.D., *Professor of Periodontology and Oral Pathology.*

Lofton Leroy Garner, A.M., *Associate Professor of Mathematics.*

*Minnie Noe Garner, *Education.*

James Reuben Gaskin, Ph.D., *Assistant Professor of English.*

Thomas Lee Gillette, A.B., *Teaching Fellow in Sociology.*

Emmanuel M. Gitlin, Ph.D., *Assistant Professor of Biblical Literature.*

James Logan Godfrey, Ph.D., *Professor of English History.*

Richard Weinberg Goldsmith, A.M., *Part-time Instructor in English.*

Charles J. Gross, Jr., M.A., *Part-time Instructor in Latin.*

*Mary Jane Harper, B.M. *English.*

*Julia Hamlet Harris, Ph.D., *English.*

*Vernon Allen Hill, A.B., *Education.*

Richard Junius Mendenhall Hobbs, LL.B., *Professor of Business Law.*

Samuel Huntington Hobbs, Jr., Ph.D., *Professor of Rural Sociology.*

Grover Cleveland Hunter, Jr., D.D.S., *Professor of Periodontology.*

Roy Lee Ingram, Ph.D., *Associate Professor of Geology.*

Cecil Johnson, Ph.D., *Professor of History.*

---

* Approved by Chancellor and University Department Chairman.

KAI JURGENSEN, A.M., *Associate Professor of Dramatic Art.*
MARGARET ELLEN KALP, M.A. in Library Science, *Assistant Professor of Library Science.*
*MAURICE ARTHUR KIDDER, S.T.M., *Religion.*
KERMIT FREDERICK KNUDTZON, D.D.S., *Associate Professor of Public Health and Dental Science.*
HUGH TALMAGE LEFLER, Ph.D., *Professor of History.*
JOE BURTON LINKER, Ph.D., *Professor of Mathematics.*
ARTHUR OWEN LINSKEY, M.A. in Education, *Personnel Intern at the Testing Service.*
*JAMES MCINTYRE, A.B. in Ed., *Mathematics.*
WILLIAM JOHN MCKEE, Ph.D., *Professor of Education in Extension Teaching.*
WILLIAM ALBERT MCKNIGHT, Ph.D., *Assistant Professor of Spanish.*
HAROLD DIEDRICH MEYER, LL.D., R.S.D., *Professor of Sociology.*
MONTE GEORGE MISKA, D.D.S., *Associate Professor of Crown and Bridge Prosthodontics.*
DAVID GETTING MONROE, Ph.D., *Associate Professor of Political Science.*
ELMER R. OETTINGER, M.A., *Part-time Instructor in English.*
JOHN WILLIAM PARKER, A.M., *Professor of Dramatic Art.*
THOMAS MCEVOY PATTERSON, A.M., *Assistant Professor of Dramatic Art.*
HERBERT WILLIAM REICHERT, Ph.D., *Assistant Professor of German.*
RICHARD EDGEWORTH RICHARDSON, D.D.S., *Assistant Professor of Oral Diagnosis and Treatment Planning.*
H. DOUGLAS SESSOMS, M.S., *Instructor in Sociology.*
*MILDRED CARSWELL SHARPE, A.B., *English.*
NATHANIEL HAWTHORNE SHOPE, M.A., *Graduate Assistant in Education.*
GEORGE L. SIMPSON, JR., Ph.D., *Associate Professor of Sociology.*
CLEMENS SOMMER, Ph.D., *Professor of the History of Art.*
RICHARD WALTON STEPHENS, M.A., *Graduate Assistant in the Institute for Research.*
CLIFFORD MAX STURDEVANT, D.D.S., *Associate Professor of Operative Dentistry.*
THOMAS H. SUMNER, B.S., *Part-time Instructor in Mathematics.*
DONALD GENTRY TARBET, Ed.D., *Assistant Professor of Education.*
*JAMES STERLING TIPPETT, M.A., *Education.*
PAUL WESLEY VINTON, D.M.D., *Associate Professor of Prosthodontics.*
PAUL WOODFORD WAGER, Ph.D., *Professor of Political Science.*
WESLEY H. WALLACE, B.S., *Assistant Professor of Radio, Television and Motion Pictures.*
JAMES QUINTER WENGER, D.D.S., M.S.D., *Assistant Professor of Oral Surgery.*
CHARLES MARTIN WESTRICK, D.D.S., *Associate Professor of Oral Surgery.*

* Approved by Chancellor and University Department Chairman.

List of Courses

(See pages 10-11 for information regarding fees.)

PAGE

Art 21
- History and Appreciation of Ancient and Medieval Art
- A Survey of The History of Painting

Business Administration 21
- Business Law
- Business English
- Mathematics of Finance

Comparative Literature 22
- Modern Continental Drama

Dentistry 22
- The Dental Assistant

Dramatic Art 22
- Playwriting
- Modern Continental Drama

Education 23
- Educational Psychology
- Classroom Management
- Children's Literature
- The Teacher and School Administration
- The Secondary School
- Elements of Statistical Methods in Education
- Principles and Methods in Adult Education
- Historic Foundations of Modern Education
- Social and Educational History of the United States
- Community Education
- Language Arts in the Elementary School
- Reading and Study Habits for the Elementary Grades
- The Teaching of the Natural Sciences in the Elementary Grades
- The Teaching of Arithmetic in the Elementary School
- Curriculum Construction
- Growth and Development of the School Child
- Social Policy and Education

English 26
- English Composition
- Engish Composition and Rhetoric
- English Literature (Sophomore Course)
- English Literature, 1780-1830
- Shakespeare
- Business English
- Introduction to the Short Story
- Creative Writing: An Analysis of Fiction
- Creative Writing: The Short Story
- American Literature
- The English Novel
- Advanced English Grammar
- Modern Continental Drama (See Dramatic Art)
- Playwriting (See Dramatic Art)

Geology and Geography 28
- Introduction to General Geology
- Principles of Geography
- Introduction to Geography
- Geography of North America

German 29
- Elementary German
- Intermediate German
- German Literature
- Scientific German

History 30
- Social Science (Freshman)
- American History
- Ancient History
- Medieval History
- English History
- American Diplomatic History
- North Carolina History
- Social and Educational History of the United States (See Education)

Latin 32
- Intermediate Latin
- Latin Composition
- Selections from Latin Prose
- Latin Poetry

Mathematics 33
- Plane Geometry
- College Algebra
- Plane Trigonometry
- Mathematics of Finance
- Introductory Mathematics
- Spherical Trigonometry
- Analytic Geometry
- Differential Calculus

PAGE

Music 34
Elementary Theory of Music
Harmony
History of Music

Philosophy 35
Introductory Logic

Physical Education 35
Personal Hygiene

Political Science 35
Citizenship
The Government of the United States
American State Government

Psychology 35
General Psychology

Radio, Television and Motion Pictures 36
Introduction to Radio, Television and Motion Pictures

PAGE

Religion 36
Origin and Significance of the Bible
The Making and Meaning of the New Testament

Romance Languages 36
Spanish Composition
Spanish Literature

Sociology and Anthropology .. 37
Introduction to Sociology
Social Problems
Marriage
The Negro
Sociology of the Family
Community Recreation
Extra-Curricular Activities
Planning and Administration of Recreation
Regional Sociology of the South
Criminology
Rural Sociology

(For courses offered at State College, Raleigh, N. C., see pp. 41-43.)

Correspondence Instruction

This catalogue explains in detail the correspondence work offered at Chapel Hill by the Extension Division of the University of North Carolina. The courses offered at the State College of Agriculture and Engineering in Raleigh are listed on pages 41-43. Full information regarding these may be secured by writing to that institution.

The courses listed herein may be pursued by anyone who is prepared to study them with profit. Those who expect to secure credit towards a degree must, of course, satisfy the entrance and other requirements. However, those who do not desire or expect such credit are permitted to register for any course in which they have an interest. Non-credit students are given the same careful instruction as those who study for credit.

Each correspondence course has been prepared by a member of the faculty so that it parallels the equivalent course given in residence and covers an equal amount of work for which equal credit is given. Although it may vary, a correspondence course which gives two semester hours' credit has about sixteen assignments and one which gives three semester hours' credit has about twenty-five assignments.

General Information

Correspondence study is a method of learning through the directed study of textbooks and supplementary material, writing the answers to the questions, and developing lines of thought contained in each assignment. Each assignment includes: (a) full directions for study, including references to textbooks; (b) suggestions and lecture material; (c) questions to be answered in writing. When a student registers for a course, he is provided a set of assignments. He does the work outlined in the first assignment and sends his paper to the Extension Division, and then begins work on the second assignment. At the University each paper is examined by an instructor, who carefully corrects and grades it and places on it constructive criticism and helpful suggestions for study. While it is very desirable that the student send in work regularly, at least one assignment each week, he has the privilege of sending it in as he is able to complete it, *provided he does not submit more than four assignments in each course within a seven-day period.* Each assignment covers approximately two days of residence work. An assignment is expected to require approximately six hours of the student's time.

Credit

Unless otherwise noted, all courses offered give credit toward bachelors' degrees at this institution. No courses are offered for graduate credit.

To work out a systematic plan for taking correspondence instruction toward the A.B. degree, study carefully the *Requirements for Bachelors' Degrees* found on pages 13-15.

The State Department of Public Instruction at Raleigh will, in

accordance with their regulations, credit all courses listed in this catalogue (except those listed as non-credit courses) toward state teachers' certificates. See pages 15-20 regarding amount of credit allowed and distribution.

For credit toward a degree at this branch of the University, not more than the equivalent of one year of residence work, 30 semester hours, may be earned by extension. *Only 30 semester hours may be taken by correspondence.* One-half of the total amount, 15 semester hours, is the maximum of correspondence work that may be completed in any twelve-month period. It is expected that the last year's work will be taken in residence. Special cases will be handled individually.

If degree credit is desired at this branch of the University an applicant for correspondence work must meet the University entrance requirements of at least fifteen acceptable units from an accredited high school. The high school record must be transferred to the University on a blank that will be furnished for the purpose. Credit for work taken at other colleges must be properly transferred to the University and accepted by the examining committee.

Women are eligible to enter the regular session of the University below the junior class only if they are *bona fide* residents of Chapel Hill or apply as candidates for one of the following degrees: B.S. in Pharmacy, or Nursing, or Medical Technology or Dental Hygiene. All other women must have two years of residence in college before being eligible to enter the University. Part or all of the residence requirements can be met in summer sessions.

Transferring Credit

Credits earned will be transferred to another institution when this request is made by the student.

The University cannot determine the policy of other institutions in regard to accepting credit for correspondence work. There are very few standard colleges or universities at this time, however, that do not accept credit for work completed through extension instruction in other standard colleges or universities. There is usually interchange of credits between the various institutions which are members of the National University Extension Association. Persons should confer with the officials of the institution where credit is desired before enrolling.

The Extension Division will transfer credit to State Departments of Education to be applied toward teachers' certificates when requested to do so. The State Department in North Carolina has requested the Division to transfer credit at only two stated times during the year—June 1st and September 1st. Unless the work is completed before September 1st, credit will not be allowed by the State Department until the June next succeeding.

Fees and Refunds

In addition to one registration fee of $2.00 which shall entitle a student to administrative and office service for one year, the course fees are:

For residents of North Carolina:
$12.00 for a course of two semester hours.
$18.00 for a course of three semester hours.
For non-residents of North Carolina:
$14.00 for a course of two semester hours.
$21.00 for a course of three semester hours.

No course fee or parts of such can be refunded after an assignment has been submitted. In the event that no report has been submitted during the first three months and application is made within that time, a portion of the fee will be refunded, provided a good cause is given for discontinuing. A course fee holds good for one year and five weeks only. To continue a course not completed within that time, a renewal fee of $3.00 will be required in order to extend the time for six months.

Under certain circumstances The Vocational Rehabilitation Division of the State Department of Public Instruction will pay the fees for those who have a physical disability. Full information will be furnished those who write the Director, Raleigh, N. C.

The United States Armed Forces Institute

The University of North Carolina is one of a number of colleges and universities selected by the United States Government to offer correspondence courses to those in service, the Government paying part of the expense. Military personnel of the United States Army, Air Force, Navy, Coast Guard, Marine Corps, and United States Public Health Service Officers whose applications have been approved are eligible to enroll through the United States Armed Forces Institute. The following subjects are included in the University's approved courses: Art, Business Administration, Education, English, Geography, German, History, Latin, Mathematics, Music, Philosophy, Physical Education, Political Science, Psychology, Religion, Sociology, and Spanish. A leaflet giving full information is available and will be sent upon request. The Government will pay the tuition, while the person in service pays for the books and a registration fee of $4.00.

Those desiring to enroll under this plan should send to the Director of the Armed Forces Institute, Madison 3, Wisconsin (1) one of the application blanks in the back of the catalogue with (2) a United States Armed Forces Institute application form secured from an I&E officer and (3) a money order, cashier's check or certified check made out to the University Extension Division for the student's share of the cost. If the Armed Forces Institute application forms cannot be secured from a post, camp or station commander, they may be obtained from the Institute Headquarters, Madison 3, Wisconsin.

Books and Supplies

Textbooks are purchased by the students themselves, usually through the Extension Division. When a student has finished a course the Division will purchase books that are in good condition if the student desires to sell them, provided the course has not been discontinued or revised and the Division is not sufficiently stocked.

Reference books for supplementary reading may be borrowed from the University Library Extension Department at a slight expense to the student for postage and packing. At the time the first request is filled, the student is asked to send to the Extension Library $1.00 to cover the charge for that package and to apply toward the charge for future packages. Any unused portion of the deposit will be refunded at the end of the course. In some instances supplementary texts may be rented from the Bureau of Correspondence Instruction.

The use of light weight paper is recommended in order to save postage. Paper suitable for typewriter or pen if not available locally may be purchased from the Bureau.

Rules Governing Correspondence Work

1. Not more than two courses may be taken at one time.

2. Students may enroll for correspondence work at any time during the year.

3. Work taken by correspondence must be completed within one year and five weeks from the date of registration or a renewal fee will be required.

4. Those who wish credit must take a final examination on completion of all assignments in a course. *The examination must be passed if credit is allowed.* This may be taken either at the University or at a standard college or university which is accessible to the student. If either arrangement is not feasible, another will be considered. Students should send full explanations when requesting exceptions. The examination must be taken no later than one month after the last assignment has been returned corrected.

5. It is desirable that students send in at least one assignment a week. *Only four assignments are accepted in a course in a seven-day period and these should be submitted one at a time.*

6. A subject for which credit has already been given cannot be taken for credit by correspondence, unless approval has been obtained from the institution where credit is desired.

7. For credit toward a degree at this branch of the University, not more than the equivalent of one year of residence work, which is 30 semester hours, may be earned by extension. *Only 30 semester hours may be taken by correspondence.* One-half of the total amount, 15 semester hours is the maximum of correspondence work that may be completed in any twelve-month period. There is a requirement that the full work of the last academic year shall be done in residence at this University.

8. Persons who are not *bona fide* residents of Chapel Hill must secure the approval of University authorities to remain in the vicinity of Chapel Hill and take correspondence courses.

9. All written reports must be returned to the Extension Division at the end of a course before a final grade or credit will be given.

10. It is expected that students will not take correspondence work while attending any institution without securing the approval of the dean or adviser at that institution.

11. When a student needs credit by a certain date, he should complete all assignments and the examination two weeks prior to that date.

Standards

The Bureau emphasizes the importance of the individual guidance of students by instructors. This involves the evaluation of students' work and the giving of helpful suggestions according to individual needs.

All students will be expected to submit their assignments in good form, grammatical and otherwise, acceptable to the instructor and in line with the requirements of the University. If an instructor in any department finds that the English composition of a student is below the standard, the symbol cc (composition condition) may accompany the final grade, as for instance Bcc, Ccc, or Dcc. This will indicate that, although the instructor has accepted as satisfactory the student's knowledge of the subject matter of the course, the penmanship, punctuation, spelling, vocabulary, or organization of the written work is not up to the University standard. A student receiving such a grade may remove the condition by completing successfully the correspondence course English cR.

The Honor System

Correspondence courses, like residence courses, are on the honor basis. The student body of the University has through a century of tradition developed an honor spirit and an honor system. A student who plagiarizes, copies, cheats, or in any way does dishonest work is not only denied credit for the course but is also dismissed from the University by his fellow students. Work must be honest above all other qualities. Each correspondence student is on his honor to do only honest work.

To make certain that there is no semblance of dishonor it should be an unfailing habit *never* to use the textbook or any other materials or aids when writing answers to questions.

No credit will be given for a course in case the student has been false to the pledge of honor. No refund will be made in such a case.

Requirements for Bachelor's Degree

The matter below, taken from the University Catalogue, is inserted so that correspondence students may select their courses in line with the requirements for the degree of Bachelor of Arts, should they desire to do so. The course leading to this degree is designed to provide a general, well rounded, liberal education. The amount of correspondence work accepted for degree credit is explained on page 10. Students who plan to take Music as their major subject should consult the University's General Catalogue for information concerning their programs for the freshman and sophomore years. Those interested in other bachelor's degrees should

likewise be guided by the University Catalogue. The University Catalogue should be consulted for information regarding grade averages and other requirements for graduation.

In order to be recommended for the degree a student must pass satisfactorily and in accordance with the qualitative standard in force the work prescribed for the lower division and at least sixty (60) semester hours in the upper division, including the prescribed subjects listed below and elective subjects in accordance with the requirements stated.

There is a requirement that the full work of the last academic year shall be done in residence at this University. It is possible for a student who has met this requirement and who needs additional credit of one or two courses to arrange with his dean to complete the work by correspondence if suitable courses are offered.

In his first two years the student pursues a more or less definite curriculum, according to the following plan:

BACHELOR OF ARTS

Freshman Year

Required:	*English 1-2 *Social Science 1-2 *Hygiene 11 Physical Education 1, 2	Choose two courses:	Astronomy 31, 32 Chemistry 11-12 or 11-21 Geology 1 or *41, *42, Geography 38 Physics 20, 24, 25 Botany 1, Zoology 1
Choose one sequence:	Mathematics *7-*8 or 11-12 or 15-16 **Greek 3-4 (or 1-2) **Latin *3-4 (or 1-2)	Choose one sequence:	†French 3-4 †German *3-*4 †Greek 3-4 †Latin *3-4 †Spanish *3-*4

Sophomore Year

English *21

Foreign Language: Course 21 in the language begun in the freshman year.

Social Sciences: One course chosen from the social science courses included in the list of sophomore electives below.

Natural Science and Mathematics: Two courses in natural science, or one course in natural science and one course in mathematics. These with the freshman courses in science must include one course in a physical science (astronomy, chemistry, physics, geology, geography) and at least one course in a biological science (bacteriology, botany, zoology, psychology). Selections may be made from the natural science courses included in the list of sophomore electives below.

Electives: Six courses from the list of sophomore electives.

Physical Education 4, 5, 6.

---

* Offered by correspondence.

** Students who choose Greek or Latin in this group must choose a modern foreign language to meet the requirement in foreign language. Courses 1-2 may be taken by students who did not have classics in high school.

† Students may meet the requirement with courses 1-2, 3, 4, provided that they have no entrance deficiency in foreign language and provided, further, that they begin a new language in college.

Sophomore Electives

Anthropology	41
Art	41, 42, *43, 44, 45, 46
Astronomy	31, 32
Botany	1, 41, 42, 43
Chemistry	11-12 or 11-21, 43, 44 (formerly 42, 41)
Classics	Greek 1-2, 3, 4, 21, 22
	Latin 1-2, *3, 4, *21, 22
	Classics 31, 32 (courses in English translation)
Dramatic Art	30
Economics	31-32
Education	41
English	*31, 32, 33 (formerly 4, 5, 6)
Geology	1 or *41, *42
Geography	38
German	*1-*2, *3, *4, *21, *22, 31, 32
History	11, *21, *22, *41, *42, *44, *45, 46, 47, 48, 49
Mathematics	*31, *32, 33. 34, 35, 36, 41, 51, 62
Music	14-15, 31-32, 44-45, 41, 55, 56
Philosophy	*21, 22, 41, 42
Physics	20, 24, 25
Political Science	*41, 42, 52, *51 (formerly 81)
Psychology	*24, *25, 40
Radio	*58
Religion	*28, 30, 45
Romance Language	French 1-2, 3, 4, 14, 15, 21, 22, 50, 51, 52
	NOTE: 21 is to count as elective only when General College language requirements are met by 1-2, 3, 4.
	Spanish 1-2, 3, 4, 14, 15, 21, 22, 50, 51, 52
	NOTE: 21 is to count as elective only when General College language requirements are met by 1-2, 3, 4.
Social Science	21
Sociology	*51, *52, 53 (Rural Sociology 53)
Zoology	1, 41, 42

Special Notices to Teachers in North Carolina

Teachers who need *professional courses* must be sure to choose them in their own professional field. For instance a primary teacher should not take a course in high school methods.

For renewing a certificate based on a bachelor's degree six semester hours' work is required and may be taken by correspondence and/or extension class. Any courses which do not duplicate courses previously taken will be suitable. Certificates based on more advanced degrees may not be renewed by correspondence.

The following regulations have been adopted by the State Department of Public Instruction:

* Given by correspondence.

1. No teacher in service shall be given credit for more than twenty semester hours during any one year between September 1st of that year and August 31st of the following year, a teacher in service being defined as one who teaches six or more months during the period. This, it must be understood, is the maximum total credit from all sources.

2. No teacher in service shall be given credit for more than twelve semester hours of extension class teaching or correspondence study instruction in any year between September 1st of that year and August 31st of the following year, with not more than eight semester hours permitted between September 1st and June 1st following.

3. Not more than forty per cent of the credit necessary to raise a certificate from one class to another may be earned through extension class teaching and/or correspondence study instruction.

4. The original professional credit necessary for an administrative or supervisory certificate may not be secured through extension class teaching and/or correspondence study instruction. The requirements for Graduate Secondary and Elementary Certificates, issued on the basis of a master's degree, may not be met by correspondence study.

5. Not more than sixteen semester hours' extension credit may be earned with the same instructor.

For High School Teachers' Certificates

The requirements for A Certificates, as outlined by the North Carolina Department of Public Instruction, are as follows:

The minimum scholastic training represents graduation from a standard four-year college. The subject, or subjects for which certification is granted appear on the face of the certificate. It is desirable that one be qualified to teach two or more subjects.

This summary of requirements is expressed in terms of professional requirements and academic requirements.

I. Professional Requirements ..... 18 S.H.

a. The Pupil 6

b. The School 6

c. Teaching and Practicum 6*

(Correspondence courses available in these areas are indicated under the School of Education.)

II. Academic requirements vary with the subject for which certification is granted. In terms of semester hours, the minimum subject matter credit for the teaching of each of the various subjects is as follows:

* Must include at least 45 clock hours of actual teaching.

1. *Art* 30
   Design (industrial, interior, costume) 9
   Drawing and Painting 9
   Ceramics and/or Sculpture 3
   Art History 6
2. *Bible and Religion* 21
   Old Testament 6
   New Testament 6
   Electives 9
3. *Commerce* 36
   Economics and Retailing 12-15
   Accounting and Management (including Office Management) 12-15
   Office Skills (shorthand, and transcription, and typing) 12
   Minimum office experience Certificate may be granted in the individual areas as follows:
   Typewriting 4
   Stenography 11-13
      Stenography, including transcription 9
      Typing 2-4
   Bookkeeping 15
      Accounting and Management
   Basic Business 24
      Economics 12
      Management and Accounting 12
4. *Distributive Education* 36
   This shall include:
      Economics 6-9
      Retailing (such as) 9-12
      Introduction to Retailing
      Store organization
      Retail advertising
      Textiles
      Merchandise information
      Salesmanship
      Accounting and Management 6-12
   Related Distributive Education and Commerce .....12-18 to be selected from:
      Art, Design, Commercial Art, Speech, Public Speaking, Economic Geography, Business Surveys or Analysis, Business (law, mathematics, typewriting, English and organization or principles)
   Minimum Business Experience—
      Exceptional experience above the minimum required may be substituted for not more than the 12 semester hours in the required subjects.
      A maximum of one full year's experience shall be required for each 6 semester hours for which substitution be made.
5. *English* 30
   Required:
      Shakespeare 3
      American Literature 3
      Advanced Grammar and Composition 3
      Recommended from—
         Speech 3
         English or American Literature 6
         Teaching of Reading 3
         Young People's Literature 3
6. *French* 24-30
   (24 semester hours based upon two or more high school units; otherwise 30 semester hours)
   Spoken Language 6
   Quantitative requirements for teaching other modern foreign languages same as for French.
7. *Health Education* 24
   1. The Individual 9-12
      a. Personal Health 3
      b. Mental Health 3
      (a. and b. may be combined)
      c. First Aid and Safety 3
   2. Community and School 9-12
      a. Principles of Public Health 6
      b. Environmental Health.. 3
      c. Healthful Family Living 3
      (a. and b. may be combined)
   3. Organization and Adm. of School Community Health 3-6
8. *Home Economics* 51
   a. Chemistry 6
   b. Biology 6
   c. Physics 2
   d. Art 3
   e. Foods 8
   f. Clothing 8
   g. Management 6
      Home Management Residence required (six weeks recommended as a minimum). Other courses may

include buying, furnishing and housing.
h. Family 6
Child Development (required)
Family Relationships (required)
Other courses may include Health, Nursing and Hygiene.
i. Social Science 6

9. *Industrial Arts* 30
a. Drawing and Design 6
b. Woodwork (such as bench work, machine work, carpentry cabinet making) .. 6
c. General Metal Work (including three or more of the following areas: cold metal, sheet metal, forging, foundry, machine shop, art metal, welding) 6
d. General Electricity (such as principles, house wiring, common appliances, and radio) 4
e. General Shop 2
f. Electives from a, b, c, d, or from such other courses as graphic arts, (printing, silk screen, photography) ceramics, automotives, aeronautics, crafts, (jewelry, leather) 6

10. *Latin* 24
Based on two units of High School Latin, to be reduced six semester hours for each additional unit of entrance credit.

11. *Library Science* 18
This shall include:
Administration and Organization of the School Library 3
Reference Books and their use 3
Book Selection for Children 2
Book Selection for Young People 2
Simplified Classification and Cataloging 3

12. *Mathematics* 21
Required—
College Algebra 3
Trigonometry 3
Analytic Geometry 3
Recommended from—
Differential and Integral Calculus 6
History of Mathematics 3
Mechanical Drawing 3
Surveying 3
Applications of Mathematics to science, engineering, commerce and industry 3
Statistics 3
Consumer Mathematics 3
College Physics 3
Navigation 3
Astronomy 3

13. *Music Education:*—
General 36
a. Applied Music 18
Piano 6
Voice 6
(At least one-half the voice credit shall be voice training)
b. Theory of Music 12
(Harmony, form, ear-training)
c. History and Appreciation of Music 6
Music Education:—Instrumental 36
a. Applied Music 21
Major Instrument 6-12
At least two minor instruments (piano advised to be one; voice permitted as one) 9-15
b. Theory of Music (harmony, form ear-training) 9
c. History and appreciation of Music 6

14. *Health and Physical Education:—Whole Time* 36
I. Area of Principles, Organization, Administration and Supervision 6-10
a. Principles of Health Education
b. Principles of Physical Education
(a. and b. may be combined)
c. Organization and Administration of Health and Physical Education
d. Evaluation and measurements in health and physical education
e. Curriculum in Physical Education
At least four areas must be included in this requirement
II. Area of Applied Techniques 10-12

a. Methods and materials in Group Games of Low Organization
b. Methods and materials in individual Sports (Tennis, Golf, Wrestling, etc.)
c. Methods and materials in Aquatics
d. Methods and materials in Rhythms
e. Methods and materials in Tumbling-Stunts
f. Methods and materials in Team Sports (Touch Football, Soccer, Speedball, Volleyball, etc.)
g. Methods and materials in team sports
(1) Football
(2) Basketball
(3) Baseball
(4) Track
At least five areas must be included in this requirement.

III. Area of Individual Physical Education 4-6
a. Individual Physical Education (may include Kinesiology)

IV. Area of Health Education 4-6
a. First Aid-Safety-Athletic Injuries
b. Problems in Health Education

V. Anatomy and Physiology 6

VI. Biological Science 6

Part-time Teacher of Physical and Health Education and Coaches of Athletic Teams 15

This shall include:

1. Principles, organization, administration, and supervision of Physical Education and Health 3-4
2. Physical Education skills and applied techniques (1) 8-9
a. Group games of low organization (games adaptable to adult groups and to children of elementary age)
b. Dual and single games (tennis, handball, golf, badminton, track, and field events, etc.)
c. Group games of high organization (football, soccer, rugby, basketball, baseball, volley ball, speed ball, lacrosse, field hockey, etc.)
d. Rhythms and dances
e. Gymnastics and stunts
f. Aquatics
3. Health Education, including the teaching of Health and school health problems 3-4

15. *Science* 30
a. Biology 6
b. Chemistry 6
c. Physics 6
d. Geography or Geology.... 3
e. Electives from a, b, c, or d 9

Individual certification will be granted in any of the specific areas a, b, c, or d, in which 12 semester hours credit is presented. Certification for the subject of General Science will require credit for 18 semester hours from three of the four areas a, b, c, and d.

16. *Social Studies* 30
a. European History or World History 6
b. American History 6
c. From Government, Geography, Economics, or Sociology 12
d. Electives from any of above 6

Individual certification will be granted in any of the specific areas:—History, Government, Geography, Economics and Sociology, in which 12 semester hours credit is presented. Certification for Citizenship or Civics, or Problems in American Democracy would require credit for at least 18 semester hours from Government, Economics and Sociology.

Agriculture:

B.S. Degree in Agriculture Education, including professional credits required for teachers of other high school subjects.

For Grammar Grade or Primary Certificates

Class A

These are certificates required of elementary teachers. They require a degree from a standard four-year college. As a part of the work, or in addition to it, the applicant shall have:

1. English
   English Required for Degree
   Children's Literature 2
   Recommended:
   Advanced Grammar and Composition 3
   Speech 3
2. American History 6
   Government 2-3
3. Geography 6
   (Principles and Regional recommended)
4. Art 6
   Music 6
5. Health and Physical Education 6
   This would include:
   Principles, Practices and Procedures in Physical Education for Elementary Schools 2
   Principles, Practices and Procedures in Health for Elementary Schools 2
6. Education 18
   a. The Pupil 6
   b. The School 6
   c. Teaching and Practicum .. 6*
   (Correspondence courses available in these areas are indicated under the Department of Education.)

Adult Education

Special arrangements will be made with instructors to meet the requirements of adult students who, for various reasons, desire to continue studying. Any mature person or group of persons, regardless of previous education, may register for any of the subjects listed in this bulletin, and the instructor will endeavor to adjust the course to the individual needs and interests. Courses in Philosophy, Psychology, Education, Religion and Sociology are especially recommended for homemakers, social workers, parents and teachers. Literary and civic club members will find courses in History, English, Political Science, foreign language, Art and Music valuable. For those in business there are courses in Business English, Busines Law, Mathematics, etc.

How to Select and Register for Correspondence Work

Read carefully all the preceding pages. Look through the list of courses and select one or two which you need or in which you are most interested. Confer with officials of the institution where credit is desired regarding the selection of your work, if necessary. Fill out the application blank in the back of this bulletin. Detach and mail it with a check or money order to the Bureau of Correspondence Instruction, Chapel Hill, N. C. The check or money order should be made payable to the University Extension Division.

Before writing to the Bureau be sure to fill out *every line* of the application blank. If you are a school teacher, be certain to give exact information concerning your teacher's certificate: i.e., *kind* (whether elementary, primary, grammar grade, or high school); *class* (whether A, B, or C); and *number*.

Textbooks will not be sent unless requested on the application blank. Those wishing to purchase texts should send an amount sufficient to cover their cost or request that they be sent C.O.D.

Note: The overall specific requirements are the same for the Primary and Grammar Grade A Certificates. In certain areas, however, particularly in Education, it is expected that there would be slightly different emphases for the two groups.

---

* Must include at least 45 clock hours of actual teaching.

Courses of Instruction

NOTE: Unless otherwise stated in the description of the courses, the "c" numbers are the same as in the University catalogue and also correspond to the "s" numbers in the summer school catalogue. For the complete understanding of a course, both the "a" and "b" parts should be taken. For degree credit both parts are required.

NOTE: The fees here listed apply to residents of North Carolina. Fees for non-residents are $14.00 for a half course and $21.00 for a whole course. *In addition* to the course fee, each student (resident and non-resident) must pay at the time of his enrollment one registration fee of $2.00 which shall entitle him to administrative and office service for one year. (See page 10.)

DEPARTMENT OF ART

c41.

THE HISTORY AND APPRECIATION OF ANCIENT AND MEDIEVAL ART.
Mr. Brame.

Credit, 2 semester hrs.
Fee, $12.00.
16 assignments.

A survey of the architecture, sculpture, and painting from the beginnings of art through the Gothic period.

*c43.

A SURVEY OF THE HISTORY OF PAINTING.
Dr. Sommer or Assistant.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

An introduction to the history and interpretation of art, tracing the development of painting in Western Civilization through the Renaissance.

SCHOOL OF BUSINESS ADMINISTRATION

c91.

BUSINESS LAW.
Professor Hobbs.
Prerequisites, Economics 31-32 if taken for credit.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

The purpose of this course is to give the student an understanding of the main principles of law which govern the daily conduct of business. Contracts and agency are given special attention.

c194. (Formerly c92)

BUSINESS LAW.
Professor Hobbs.
Prerequisite, Business Administration c91 or equivalent.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

The law of negotiable instruments and the legal principles governing sales including conditional sales and other security transactions are covered. Corporations, partnerships, suretyships and mortgages are also considered.

Allied Subjects

c10.

MATHEMATICS OF FINANCE.
(See description of this course listed under Department of Mathematics.)

*Not available before October, 1955.

c51a.

BUSINESS ENGLISH.
(See description of this course listed under Department of English.)

c51.

BUSINESS ENGLISH.
(See description of this course listed under Department of English.)

DEPARTMENT OF COMPARATIVE LITERATURE

c162.

MODERN CONTINENTAL DRAMA.
(See description of this course listed under Department of Dramatic Art.)

SCHOOL OF DENTISTRY

cn1.

THE DENTAL ASSISTANT. — Non-credit.
Professor Brauer and Faculty. — *25 assignments.*
Fee, $50.00.

This course is designed for the person who already is a Dental Assistant, or who desires to become a Dental Assistant. It is patterned from the recommended curriculum of the American Dental Assistants' Association and has been accepted by that Association as meeting one of the requirements for taking the examination of the American Dental Assistants' Association.

DEPARTMENT OF DRAMATIC ART

c155a.

PLAYWRITING. — Credit, 2 semester hrs.
Professor Patterson — Fee, $12.00.
18 assignments.

A practical course for the student playwright in the analysis of the one-act play, with a special study of the materials and technical devices for achieving dramatic effect, and some consideration of the sources from which subject matter may be drawn. The writing of a one-act play based on an original story is required.

c155b.

PLAYWRITING. — Credit, 2 semester hrs.
Professor Patterson. — Fee, $12.00.
16 assignments.

This course is a continuation of c155a. The emphasis, however, is less on theory and more on practice. One one-act play of some merit will be required and the course will be largely made up of criticism, suggestions and comments on the play from its inception to its final form. The aim is to give the student as much individual attention as possible.

c162.

MODERN CONTINENTAL DRAMA. — Credit, 3 semester hrs.
Professor Jurgensen. — Fee, $18.00
25 assignments.

A study of representative plays of the modern period from Ibsen to Giraudoux.

SCHOOL OF EDUCATION

(The area of the subject is indicated in accordance with the State Department of Public Instruction of N.C. See page 16.)

c71a-71b. (The Pupil)
EDUCATIONAL PSYCHOLOGY.
Mr. Linskey.

Credit, 2 semester hrs. each.
Fee, $12.00 each.
15 assignments each.

The critical consideration of such topics as original nature of man, heredity versus environment, kinds of learning, and factors influencing learning, individual differences, mental hygiene, and mental measurement.

c94a-c94b. (The School)
CLASSROOM MANAGEMENT.
Professor Tippett.

Credit, 2 semester hrs. each.
Fee, $12.00 each.
16 assignments each.

A course for teachers on the organization and direction of activities in the classroom. Class routine, lesson planning, conduct of the recitation and extra-curricular activities will be included.

c93.
CHILDREN'S LITERATURE.
Professor Kalp.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This course is designed to acquaint students with the field of children's literature so that they may make use of its wide variety of materials in their work with children. The development of ability to know, select and present literature to children of various ages, grade levels and interests is stressed.

c98a-c98b. (The School)
THE TEACHER AND SCHOOL ADMINISTRATION.
Mr. Shope.

Credit, 2 semester hrs. each.
Fee, $12.00 each.
16 assignments each.

The general purpose of this course is to give the teacher an understanding of the scope and general character of the public school system, of its organization and the administrative units and agencies through which it is managed, and those administrative problems in which the classroom teacher may be expected to participate.

c99. (The School)
THE SECONDARY SCHOOL.
Professor Tarbet.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This course emphasizes the purposes and practices of the modern secondary school in providing for the education of the adolescent boy or girl. This includes a study of the purposes and objectives, the curriculum, including co-curricular activities, the guidance services, and stresses issues and trends in secondary education.

c103a.
ELEMENTS OF STATISTICAL METHODS IN EDUCATION.
Professor Tarbet.

Credit, 2 semester hrs.
Fee, $12.00.
15 assignments.

This course provides the statistical training necessary for understanding the reports of modern educational investigations and for interpreting simple research projects.

c130. (The School)
PRINCIPLES AND METHODS IN ADULT EDUCATION.
Professor McKee.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

Consideration will be given in this course to (1) principles in organizing adult study groups; (2) how adults learn; (3) guidance and counselling of adults; (4) preparing curriculum materials for adult groups; and (5) teaching and learning methods and techniques in adult education.

c142a-142b.
HISTORIC FOUNDATIONS OF MODERN EDUCATION.
Mr. Hill.

Credit, 2 semester hrs. each.
Fee, $12.00 each.
15 assignments each.

This course traces the development of some of the more important educational problems of modern times as they have been affected by the social and political facts of history, by the contributions of the leading educational theorists and by institutional practice.

c143a-c143b. (The School)
SOCIAL AND EDUCATIONAL HISTORY OF THE UNITED STATES.
Mr. Hill.

Credit, 2 semester hrs. each.
Fee, $12.00 each.
16 assignments each.

The purpose of this course is to present the evolution of the educational practices and institutions of the United States. These will be traced through: (a) the period of transplanting of European institutions; (b) the period of modification of institutional life to meet new conditions; and (c) the period of development of an educational system of free schools in harmony with the political and social ideals and institutions of America.
Note: This course is accepted as the equivalent of History 170.

c144. (The School)
COMMUNITY EDUCATION.
Professor Tippett.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

The theories and practices in community education are considered in this course. Students are asked to become familiar with aspects of community life and to find out what has been done in various communities to improve them and in various schools to use them in connection with the school curriculum and to induct students into participation in democratic citizenship. The preparation of teachers for leadership in community education is stressed.

c152a. (Teaching and Practicum)
THE LANGUAGE ARTS IN THE ELEMENTARY SCHOOL.
Professor McKee.

Credit, 2 semester hrs.
Fee, $12.00.
17 assignments.

This course aims to have pupils recall and use their experiences in activities such as conversation, story telling, dramatics, choral speech, broadcasting and discussion to improve their oral communication. Activities such as the creative writing of poems, stories, plays, themes and letters to develop the pupil's written expression are important phases of the course. Voice and speech development, the enrichment of the child's experiences, vocabulary and expression through the use of selected literature and improved methods of teaching the tools of language, such as grammar, spelling and handwriting receive adequate attention.

c152b. (Teaching and Practicum)
READING AND STUDY HABITS FOR THE ELEMENTARY GRADES.
Professor Tippett.

Credit, 2 semester hrs.
Fee, $12.00.
16 assignments.

This course considers the place of reading and study in the school program, the way teachers may provide for the maximum development of each pupil through making available desirable reading material and the remedial measures needed to meet reading and study difficulties.

c155. (Teaching and Practicum)
THE TEACHING OF THE NATURAL SCIENCES IN THE ELEMENTARY GRADES.
Professor Tippett.

Credit, 2 semester hrs.
Fee, $12.00.
16 assignments.

The informational content of science is studied in relation to science instruction in the elementary school. Purposes, methods, and materials for such instruction are surveyed. Stress is laid on making the best use of common things at hand, in demonstrating and experimenting.

c156. (Teaching and Practicum)
THE TEACHING OF ARITHMETIC IN THE ELEMENTARY SCHOOL
Mrs. Garner.

Credit, 2 semester hrs.
Fee, $12.00.
17 assignments.

This course deals with the organization and selection of subject matter in arithmetic with modern methods of teaching the subject in the elementary school.

c160a. (The School)
CURRICULUM CONSTRUCTION.
Professor Tippett.

Credit, 2 semester hrs.
Fee, $12.00.
16 assignments.

The general principles and techniques of curriculum construction on both elementary and secondary school levels comprise the major part of the course. Special attention will be focused upon recent trends in curriculum revision and organization in modern schools.

c171a-c171b. (The Pupil)
GROWTH AND DEVELOPMENT OF THE SCHOOL CHILD.
Professor Linskey.

Credit, 2 semester hrs. each.
Fee, $12.00. each.
16 assignments in c171a.
17 assignments in c171b.

(a) Child development. A study of the growth and development of children up to the time of adolescence. Changes in emotions are emphasized as well as those of intellect. (b) Adolescence. A study of the changes in emotions, attitudes and interests which take place during the adolescent years.

c197.
SOCIAL POLICY AND EDUCATION. (The individual and social development of pupils)
Professor McKee.

Credit, 2 semester hrs.
Fee, $12.00.
16 assignments.

This course deals with the needs and problems of socialization and social progress from the standpoint of education. It attempts to define a social policy for education based fundamentally on democratic principles and discusses the vital educational issues involved in that policy.

DEPARTMENT OF ENGLISH

cR.

ENGLISH COMPOSITION.
Mrs. Sharpe.

Non-credit (see description)
Fee, $18.00.
25 assignments.

This course is offered for all students who fail to qualify for English 1. To students completing this course with grades of A or B, credit for English 1 will be allowed.

c1.

ENGLISH COMPOSITION AND RHETORIC.
Mrs. Sharpe.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This course has for its object the mastery of the sentence and the relation of sentence structure to paragraph structure.

c2.

ENGLISH COMPOSITION AND RHETORIC.
Mrs. Harper.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

The purpose of English c2 is to develop fluency and effectiveness in writing. The four basic kinds of discourse and elementary matters of style will be studied. The emphasis of the course is upon the writing of themes although readings from the text will be analyzed.

c21.

ENGLISH LITERATURE (Sophomore).
Mr. Barnhart.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This course is an introduction to English literature through the study of representative works of Chaucer, Shakespeare, and Milton.

c31.

ENGLISH LITERATURE (Sophomore).
Mr. Barnhart.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

A survey of English literary masterpieces of the 18th and 19th centuries from Swift through Arnold.

c50.

SHAKESPEARE.
Mr. Barnhart.
Sophomore, junior, and senior elective.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

A study of Shakespeare's plays. About twenty representative comedies, tragedies and histories will be studied.

c51a.

BUSINESS ENGLISH.
Mr. Goldsmith.
This course is similar to English c51. Students should not take both courses.

Credit, 2 semester hrs.
Fee, $12.00.
17 assignments.

(Those who have had English c6, Business English, should not take this course.)

c51.

BUSINESS ENGLISH.
Mr. Goldsmith.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

A course in the vocabulary, forms and literature of the business profession with special attention to letters of application and inquiry; routine, collection, adjustment and sales letters, business reports, and technical articles. Specimen letters are studied and criticized and actual business problems solved through written work.

c53.

CREATIVE WRITING: AN ANALYSIS OF FICTION.
Miss Harris.

Credit, 3 semester hrs.
Fee, $18.00, plus critical analysis fee, $5.00.
25 assignments.

A composition course designed primarily to offer students an opportunity for short story analysis and the writing of four stories. The work of various well-known authors will be studied There is also study in the field of general literary principles.

NOTE: Those who have not had a course equivalent to English c54a are advised to take that course first. Applicants for this course who have not had English c54a should send to the Bureau, for the instructor's consideration, a sample manuscript of their own and a fee of 75c.

c54a.

INTRODUCTION TO THE SHORT STORY.
Mr. Oettinger.

Credit, 2 semester hrs.
Fee, $12.00.
17 assignments.

An analysis of numerous short story materials and techniques. Introductory to English c53.

c54.

CREATIVE WRITING:
THE SHORT STORY (Advanced).
Prerequisite, English c53, or the equivalent.
Mr. Eaton.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

The major aim of this course is to discover and develop the creative writing abilities of students in the planning and preparing of short stories.

c81.

AMERICAN LITERATURE.
Professor Adams.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This course concerns a study of the Colonial and Revolutionary periods and of the early 19th century through Poe, Hawthorne and Melville.

c84.

ENGLISH LITERATURE, 1780-1830.
Mr. Barnhart.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

A course in the literature of the English Romantic Period, the purpose of which is to acquaint the student with the best thought and feeling of the time. Special attention is given to the greater poets: Coleridge, Wordsworth, Scott, Byron, Shelley, and Keats.

c91.
THE ENGLISH NOVEL.
Mrs. Antonakos.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This is a course in the development of the English novel, particularly in the eighteenth and nineteenth centuries. Special attention is given to the works of Jane Austen, Scott, Dickens, Thackeray, and George Eliot.

*c96.
ADVANCED ENGLISH GRAMMAR.
Professor Gaskin.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

A study of modern English grammar based, first, on a description of the grammar and, second, on an examination of the rules of correct usage. This course is designed especially for prospective teachers of English but others may take it.

c155a-b.
PLAYWRITING.
(See description of these courses listed under Department of Dramatic Art.)

c162.
MODERN CONTINENTAL DRAMA.
(See description of this course listed under Department of Dramatic Art.)

DEPARTMENT OF GEOLOGY AND GEOGRAPHY

Geology

c41-c42.
INTRODUCTION TO GENERAL GEOLOGY.
Professor Ingram.
Sophomore, junior, and senior electives.

Credit, 4 semester hrs. each.
**Fee, $24.00 each.
Lab. Fee, $1.00 each.
30 assignments each.

c41. Dynamical Geology. This course deals with the physical and dynamical geology of the earth.
c42. Historical Geology. Prerequisite, Geology c41. A broad study of the geological history of the earth and its inhabitants, as revealed chiefly in earth records. A scientific and cultural course.
Laboratory materials used in these courses will be furnished by the Extension Division.

Geography

c15a-c15b.
PRINCIPLES OF GEOGRAPHY.
Professor Basile.

Credit, 2 semester hrs. each.
Fee, $12.00 each.
16 assignments each.

This is an introductory course in college geography in which the interrelationship of man and his geographic environment are studied.

---

* Not available until October, 1955.
** The fee for out-of-state students is $28.00 each, in addition to the registration fee. See page 10.

c31.

INTRODUCTION TO GEOGRAPHY.
Professor Basile.

Credit 2⅔ semester hrs.
*Fee, $16.00.
20 assignments.

This course is a study of the principles underlying the climate, relief, native vegetation, soils, and distribution of minerals and metals of the world.

c157.

NORTH AMERICA.
Professor Basile.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This course comprises a regional study of North America with emphasis on the portion occupied by English-speaking peoples. A brief introduction to the continent as a whole, with emphasis on climate, terrain, and natural resources as fundamental bases of the present geographic pattern, is followed by a study of each of the several regions in light of its own geographic conditions and its place in the whole geographic pattern. A detailed study of Southeastern United States climaxes the course.

DEPARTMENT OF GERMANIC LANGUAGES

NOTE: The German Department will accept no more than six semester hours' credit of German by correspondence for fulfilling the language requirement. However, all work taken by correspondence beyond the language requirement will be acceptable for credit by the Department.

c1.

ELEMENTARY GERMAN.
Professor Reichert.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

A basic course which seeks to develop reading skill by teaching both the principles of grammar and oral reading fluency (pronunciation and intonation). Tape recordings of the reading material in the course suitable for any machine are available on request, for approximately $5.00. The use of the tape recordings is strongly recommended.

c2.

ELEMENTARY GERMAN.
Professor Reichert.
Prerequisite, German 1 or the equivalent.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This is a secondary course in which reading skill is further developed and the principles of grammar briefly reviewed. From the first readings in simplified German the student is gradually led to the superb style of the Austrian writer, Arthur Schnitzler.

c3-c4.

INTERMEDIATE GERMAN.
Professor Reichert.
Prerequisite, German 1-2 or the equivalent.

Credit, 3 semester hrs. each.
Fee, $18.00 each.
25 assignments each.

These courses are designed to develop speed and accuracy in reading German, and to acquaint the student with some of Germany's outstanding prose writers. German c3 entails in addition to the reading a thorough grammar review. German c4 includes works by Eichendorff, Hesse, and Mann, and introduces an easier work by Kästner for sight reading.

*The fee for out-of-state students is $18.65, in addition to the registration fee. See page 10.

c21-c22.

GERMAN LITERATURE.
Professor Reichert.
Prerequisite, German 1-2-3-4 or equivalent.

Credit, 3 semester hrs. each.
Fee, $18.00 each.
25 assignments each.

These courses have as their purpose to develop in the student a capacity to read classical German and to familiarize him with German literature in its broad outlines as well as more directly with some of its masterpieces. German c21 surveys German literature from its beginnings to Lessing and Schiller, with readings from Schiller's ballads and plays. German c22 is a study of Classicism and Romanticism, with readings from Goethe, Grillparzer, and Kleist.

c24.

SCIENTIFIC GERMAN.
Professor Reichert.
Prerequisite, German 1-2-3-4 or equivalent.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

The aim of this course is to develop skill in reading German in the special field in which the student is interested. These fields are (1) chemistry, (2) medicine, biology, zoology, and (3) physics, mathematics. Others than undergraduates will find the courses valuable in that it will aid persons in preparing for the language examinations required for an advanced degree. The course is open to those who have completed the equivalent of four courses in German and have a basic knowledge of German vocabulary and grammar. It is so designed as to enable persons who have not studied German recently to refresh their knowledge of basic principles of grammar.

DEPARTMENT OF HISTORY

c1.

FRESHMAN SOCIAL SCIENCE.
Professor Godfrey.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This is an historical study of the institutions of western civilization, designed to promote an understanding of the social, political, and economic aspects of the modern world.

c2.

FRESHMAN SOCIAL SCIENCE.
Professor Godfrey.

Credit, 3 semester hrs.
Fee, $18.00.
26 assignments.

This is a continuation of Social Science c1, to be taken only by those who have had that course or the equivalent.

c21, c22.

AMERICAN HISTORY.
Professor Lefler.
Sophomore elective.

Credit, 3 semester hrs. each.
Fee, $18.00 each.
25 assignments each.

A general survey of the history of the United States. The first course begins with Columbus' discovery of America and goes to the end of the Civil War; the second begins at this point and ends in 1949. (Both American History sequences, c21-c22 and c71-c72, should not be taken.)

c21, c22, c23.
AMERICAN HISTORY.
Professor Lefler.
Sophomore elective.

Credit, 2 semester hrs. each.
Fee, $12.00 each.
18 assignments each.

A general survey of the history of the United States. The first course carries the story from Columbus' discovery of America to about 1823, the second from this point to 1897, and the third covers approximately the last five decades.
NOTE: Those desiring degree credit at the University should take History c21, c22 (3 semester hrs. each) instead of these courses. Those who have had any part of the three course arrangement previously given as History 21, 22, 23 (2 semester hrs. each) may secure the remaining work by correspondence.

c41.
ANCIENT HISTORY.
Mr. Cassidy.
Sophomore, junior and senior elective.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

A course dealing with the history of the Orient, Greece, and Rome to the time of Constantine. Particular attention will be paid to social and economic conditions, and cultural and religious developments.

c42.
MEDIEVAL HISTORY.
Mr. Cassidy.
Sophomore, junior and senior electives.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This course deals with the history of Western European civilization during the Middle Ages (300-1500). Special emphasis is given to the economic-social and cultural developments during the late Roman Empire, the so-called "Dark Ages," the age of the Crusades and the Renaissance.

c44, c45.
ENGLISH HISTORY.
Professor Godfrey.
Sophomore elective.

Credit, 3 semester hrs. each.
Fee, $18.00. each.
25 assignments each.

History c44 is a survey of English history from the earliest times to 1714, while History c45 covers the period from then until 1954.

c 71, c72.
AMERICAN HISTORY.
Professor Lefler.
Junior-senior elective.

Credit, 3 semester hrs. each.
Fee, $18.00 each.
25 assignments each.

A general survey of the history of the United States. The first course begins with Columbus' discovery of America and goes to the end of the Civil War; the second begins at this point and ends in 1949. (Both American History sequences, c21-c22 and c71-c72, should not be taken.)

c143.
AMERICAN DIPLOMATIC HISTORY.
Professor Johnson.
Junior-senior elective.
Prerequisite, American History.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This course is a chronological treatment of American foreign relations from 1763 to the present. It discusses important characters and events in our diplomatic history and traces the origin and development of basic trends in our foreign policy.

c161.

NORTH CAROLINA, 1584-1815.
Professor Lefler.
Junior-senior elective.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

A survey of the political, social, economic and cultural development of North Carolina from the first settlement until 1815.

c162.

NORTH CAROLINA, 1815-1950.
Professor Lefler.
Junior-senior elective.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

A survey of political, economic, social and cultural development in North Carolina since 1815.

c170a-c170b.

SOCIAL AND EDUCATIONAL HISTORY OF THE UNITED STATES.
(See description of these courses under Department of Education.)

NOTE: Those who have taken Education c37a-b or c143a-b in previous years should not take these courses.

DEPARTMENT OF LATIN

c3.

INTERMEDIATE LATIN.
Mr. Gross.
Prerequisites, two years of high school Latin, or one year of elementary college Latin.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This course is concerned with the translating of Cicero's *De Senectute*, with work in vocabulary, and with a review of the principles of grammar.

c8.

LATIN COMPOSITION.
Mr. Gross.
Prerequisites, four years of high school Latin, or two years of college Latin.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

The course will begin with translation into Latin of detached sentences illustrating the general principles of syntax and word order; the second half of the course will deal with continuous narrative and with questions of diction and style.

c21.

SELECTIONS FROM LATIN PROSE.
Mr. Gross.
Prerequisites, two years of high school Latin, or one year of elementary college Latin.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

The course consists of a review of Latin grammar and a study of Cicero's *De Amicitia.*

c26.

LATIN POETRY.
Mr. Gross.
Prerequisites, four years of high school Latin, or two years of college Latin.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

The course comprises the reading of the *Phormio* of Terrence and selected odes of Horace. Emphasis is put on content and literary form.

DEPARTMENT OF MATHEMATICS

NOTE: Those desiring degree credit at the University should take Mathematics c7-c8 instead of c1-c2-c3.

cnA.

PLANE GEOMETRY. — Non-Credit.
Mr. Sumner. — Fee, $25.00.
Mr. McIntyre. — *27 assignments.*

A course designed to enable the student to acquire a thorough knowledge of the facts of plane geometry needed for continued work in mathematics and allied subjects. This course will be accepted by the University to remove a deficiency in plane geometry for admission. The material covered in this course, if taken in high school, would require one full school year, being equivalent to one unit.

c1.

INTRODUCTORY MATHEMATICS. — Credit, 2 semester hrs.
Professor Garner. — Fee, $12.00.
17 assignments.

This course treats the basic problems of college algebra. For a longer course in the subject, see Mathematics c7.

c2.

INTRODUCTORY MATHEMATICS. — Credit, 2 semester hrs.
Professor Garner. — Fee, $12.00.
18 assignments.

A study of functions, and their graphs, the limit notion and graphical treatment of the fundamental notions of the differential and integral calculus.

c3.

PLANE TRIGONOMETRY. — Credit. 2 semester hrs.
Professor Linker. — Fee, $12.00.
18 assignments.

The fundamentals of plane trigonometry are studied with less extensive application than in Mathematics c8.

c7.

COLLEGE ALGEBRA. — Credit, 3 semester hrs.
Professor Garner. — Fee, $18.00.
25 assignments.

This course treats the fundamental operations of algebra and emphasizes the solution of linear and quadratic equations. For a shorter course, see Mathematics c1.

c8.

PLANE TRIGONOMETRY. — Credit, 3 semester hrs.
Professor Linker. — Fee, $18.00.
25 assignments.

This course concerns itself with the definitions of the trigonometric functions, their relations to each other, and the application of these functions and log tables to the solutions of plane triangles.

c10.

MATHEMATICS OF FINANCE. — Credit, 3 semester hrs.
Professor Linker. — Fee, $18.00.
25 assignments.

This course is a study of simple and compound interest, annuities and their application to debt retirement by amortization and sinking fund methods, depreciation, and bonds, with an introduction to the mathematics of insurance.

c13.

SPHERICAL TRIGONOMETRY.
Professor Garner.

Credit, 2 semester hrs.
Fee, $12.00.
18 assignments.

This course is designed especially for those who are interested in nautical and aerial navigation. It concerns a study of the mathematics relations existing among the sides and the angles of a triangle on the surface of a sphere.

c31.

ANALYTIC GEOMETRY.
Mr. Sumner.
Prerequisites, Math 7 and 8.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This course includes the standard treatment of lines, conic sections, transformation of coordinate systems by translation and rotation, polar coordinates, parametric equations, lines and planes in solid analytic geometry.

c32.

DIFFERENTIAL CALCULUS.
Mr. Sumner.
Prerequisite, Math c31.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This course is devoted primarily to a study of the derivative and its applications in elementary differential geometry, physics, and the theory of maxima and minima. In the latter part of the course an introduction to the theory of infinite series is followed by a study of Taylor's series.

DEPARTMENT OF MUSIC

c1.

ELEMENTARY THEORY OF MUSIC
Mr. Davis.

Credit, 2 semester hrs.
Fee, $12.00.
15 assignments.

A study of the rudiments of music; scales, intervals, and elementary harmonic material with practice in melody writing. The student must have access to a piano. Dictation exercises are required.

c14-c15-c16

HARMONY.
Mr. Davis.
Prerequisite, Music 1, or the equivalent.

Credit, 2 semester hrs. each.
Fee, $12.00 each.
18 assignments each.

A first-year course in harmony. This covers the ordinary harmonic resources up to the chords of the seventh, their inversions, and elementary modulation. The student must have access to a piano.

c24-c25-c26*

HISTORY OF MUSIC.
Mr. Davis.

Credit, 2 semester hrs. each.
Fee, $12.00 each.
Lab. fee, $4.00 for c24 and $6.50 for c25.
15 assignments each.

Phonograph recordings of the music of the periods are used. Students will need a long play record player (33⅓ r.p.m.). Music c24-c25-c26 will be accepted for elective credit as the equivalent of Music 47-48 in residence. Music c24 covers the period from antiquity to the end of the sixteenth century. Music c25 concerns the seventeenth and eighteenth centuries.

* Music c26 not available before January, 1956.

DEPARTMENT OF PHILOSOPHY

c21.
INTRODUCTORY LOGIC.
Professor Adams, or Assistant.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

A study of the fundamental principles of efficient thinking as a basis for rational belief and intelligent action. Practical orientation with emphasis on meeting problematic situations. Consideration of linguistic obstacles to clear and straight thinking; standards of valid reasoning; methods of confirming statements.

DEPARTMENT OF PHYSICAL EDUCATION

c11.
PERSONAL HYGIENE.
Professor Blyth.

Credit, 2 semester hrs.
Fee, $12.00.
16 assignments.

This course is designed to acquaint the student with basic scientific information regarding individual and community health, to develop wholesome attitudes toward physical, mental and social health, and to assist the student in developing sound health practices.

DEPARTMENT OF POLITICAL SCIENCE

cn1.
CITIZENSHIP.
Professor Wager.

Non-Credit.
Fee, $4.50.
21 assignments.

This course in citizenship is offered in cooperation with the United States Immigration and Naturalization Service to persons in the state who wish to become citizens of the United States. It is designed especially for those who cannot attend citizenship classes. Other sections of the course are available, the number of assignments for each varying.

c41.
THE GOVERNMENT OF THE UNITED STATES.
Professor Monroe.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

A general course dealing with the national government of the United States. Attention will be directed to the constitutional basis, the historical development, and the practical organization and operation of the institutions established for administering national affairs.

c51.
(formerly c81.)
AMERICAN STATE GOVERNMENT.
Professor Monroe.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

A study of the principles, organization, and administrative methods and functions of the state governments.

DEPARTMENT OF PSYCHOLOGY

*c24-c25.
GENERAL PSYCHOLOGY.
Mr. Campbell.
Junior and senior elective.

Credit, 3 semester hrs. each.
Fee, $18.00 each.
25 assignments each.

The aim of the course is to present the essential phenomena of psychology, and the various methods of approach. Emphasis is placed on the organic relationships within the whole field.

* Credit only for lecture part of course.

DEPARTMENT OF RADIO, TELEVISION AND MOTION PICTURES

**c58.

INTRODUCTION TO RADIO AND TELEVISION.
Mr. Wallace.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

A survey course covering the organization and operation of stations and networks, participating organizations, the audience, the program and school broadcasting.

DEPARTMENT OF RELIGION

c28.

THE ORIGIN AND SIGNIFICANCE OF THE BIBLE.
Mr. Kidder.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This course is an introduction to the literature of the Bible, with special consideration of the impact of the Hebrew-Christian faith upon modern man as he seeks a religious orientation in the contemporary situation.

*c81.

THE MAKING AND MEANING OF THE NEW TESTATMENT.
Professor Gitlin.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This course begins with a study of the inter-testamental situation out of which the New Testament arose and then considers that literature in an attempt to provide a comprehensive understanding of the life and teachings of Jesus, the establishment and expansion of the early Christian Church, and the interpretation of Christianity to the Roman World.

DEPARTMENT OF ROMANCE LANGUAGES

NOTE: Candidates for degree credit at the University are required to take their courses in this department in residence.

Spanish

c3-c4.

SPANISH COMPOSITION.
Professor McKnight.
Prerequisites, either two years of high school or one year of college Spanish.

Credit, 3 semester hrs. each.
Fee, $18.00 each.
25 assignments each.

The object of these courses is to provide the student with an opportunity to acquire practice in writing Spanish.

c21-c22.

SPANISH LITERATURE.
Professor McKnight.
Prerequisites, Spanish 3-4 or 11-12-13 or the equivalent.

Credit, 3 semester hrs. each.
Fee, $18.00 each
25 assignments each.

Spanish c21 is a general survey of Spanish literature during the 16th and 17th centuries. There is the reading of selections from Lope de Vega, Cervantes, Calderon, etc. Spanish c22 gives a general survey of Spanish literature since the classical period, with special stress on the 19th century.

** Not available until June, 1956.
* Not available before September, 1955.

DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY

General Sociology

c51.
INTRODUCTION TO SOCIOLOGY.
Mr. Stephens.
Sophomore, junior, senior elective.

Credit, 3 semester hrs. each.
Fee, $18.00.
25 assignments.

A general course dealing with the structure and function of contemporary societies and social relationships. A study is made of the way societies are formed, how they achieve their organization and unity, and the way they change.

c52a-c52b.
SOCIAL PROBLEMS.
Mr. Barth.

Credit, 2 semester hrs. each.
Fee, $12.00 each.
16 assignments each.

(a) Part I. Natural and cultural heritage, geographic backgrounds, natural resources, technology and change, biological and psychological backgrounds, regional factors.

Part II. A study of the people—workers, youth, elders, children women, races, nationalities and the handicapped.

(b) The social institutions: government and democracy, industry and work, school and education, church and religion, home and family, the community—rural and urban. Testing grounds of the people; world outlook, public welfare, social technology, social planning, and modern trends.

c62a-c62b.
MARRIAGE.
Mr. Gillette.

Credit, 2 semester hrs. each.
Fee, $12.00 each.
16 assignments each.

(a) Backgrounds of American marriage institutions; analysis of mate selection and the involvement processes leading to marriage.
(b) Adjustments after marriage; marital conflict and accommodation; problems of parenthood; consideration of counseling and other stabilizing devices provided by communities.

c125.
THE NEGRO.
Mr. Barth.
Junior and senior elective.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This course includes a study of the American Negro's historical and cultural background, aspects of Negro life and the problems of race relations.

c161a-c161b.
SOCIOLOGY OF THE FAMILY.
Mr. Gillette.

Credit, 2 semester hrs. each.
Fee, $12.00 each.
16 assignments each.

(a) A world view of the variety of family forms using an historical-sociological frame of reference; contributions of Western Civilization to the contemporary American scene.
(b) Differentiation of modern American family types; impact of urbanization and other sources of social change on marriage and family designs; unsolved problems and proposed solutions.

c173a-c173b.
COMMUNITY RECREATION.
Mr. Sessoms.

Credit, 2 semester hrs. each.
Fee, $12.00 each.
16 assignments each.

(a) Foundations of organized recreation: backgrounds, social institutions, recreation and government, private interests, planning and legislation, organization and administration, personnel problems.

(b) Areas and facilities: program of activities, program planning, business procedure, finances, public relations, emerging recreation opportunities.

c175.
EXTRA-CURRICULAR ACTIVITIES.
Professor Meyer.

Credit, 2 semester hrs.
Fee, $12.00.
16 assignments.

In this course a study is made of the extra-curricular activities of pupils in the interest of arranging successful programs.

c176a.
PLANNING AND ADMINISTRATION OF RECREATION.
Professor Meyer.

Credit, 2 semester hrs.
Fee, $12.00.
16 assignments.

The course justifies recreation as a function of government, stresses the recreation interests of government on all levels, concerns desirable planning and administration, offers constructive illustrations and suggestions of recreation possibilities under government sponsorship and indicates suitable forms of publicity leading to favorable public relations in the field of recreation.

c181a-181b.
REGIONAL SOCIOLOGY OF THE SOUTH.
Professor Simpson.

Credit, 2 semester hrs. each.
Fee, $12.00 each.
15 assignments each.

A study is made of the South in terms of natural resources, human resources, and culture, with emphasis upon regional planning.

c192.
CRIMINOLOGY.
Mr. Gillette.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

The principles of criminology and penology with emphasis on psycho-sociological factors; study of historical and contemporary theory and practice.

Rural Sociology

c102.
RURAL SOCIOLOGY.
Professor Hobbs.

Credit, 3 semester hrs.
Fee, $18.00.
25 assignments.

This course makes a study of the rural community, considering the advantages and disadvantages of farm life, rural health, sanitation and social institutions.

UNIVERSITY EXTENSION SERVICES

In addition to the correspondence courses listed in this catalogue, the University of North Carolina offers, through the Extension Division, the following services to the people of the state:

Adult Education. Adult Discussion Groups on World Politics and other subjects are conducted in several communities, in cooperation with local sponsors.

Art. The North Carolina School Art Exhibition is conducted annually in cooperation with the Woman's College of the University of North Carolina and the North Carolina Federation of Women's Clubs. Circulating art exhibits may be secured on a loan basis.

Audio-Visual Aids. Sound and silent educational films, lantern slides, recordings and other teaching aids are lent to schools, colleges, and community organizations. A special catalogue of this service may be obtained upon request.

Dramatic Art. Assistance is given in organization for dramatic activities, in play selection and production, and in the loan of playbooks and other library material. An annual tournament is conducted in cooperation with the Carolina Dramatic Association.

Extension Class Instruction. Late afternoon, evening, and Saturday classes are organized wherever enough enrollments to cover expenses are secured. Courses of both a vocational and cultural nature are offered with college credit, if desired.

Institute of Opera. In addition to offering training opportunities, the Institute, in collaboration with the Grass Roots Opera Company, schedules public performances of some of the best known operas, sung in English. Members of the staff are available for concert and club engagements.

Interscholastic Activities. In cooperation with several University departments and state agencies, the Division conducts annual contests in debating and academic subjects. The High School World Peace Study and Speaking Program is administered as a special service to high schools in this and other states.

Lectures. Popular and technical lectures and readings by members of the faculty are arranged for schools, clubs, and other community organizations. Lecture courses either on a particular subject or a series of topics may be obtained. An extension Bulletin on Program Services is available.

Library Service. Reading courses, books, and reference materials are lent to individuals and groups interested in the systematic study and discussion of literary, historical, social and other subjects. There are available about one hundred outlines for study suitable for women's clubs or other groups.

Music. Concerts, recitals, and other musical programs are available to community organizations. A program of music appreciation for farm families is sponsored cooperatively with the Agricultural Extension Service.

Postgraduate Courses. In cooperation with the Division of Health Affairs, programs of extension instruction are conducted both on and off the campus for doctors, dentists, health officials, nurses, and other professional workers.

Radio. Programs are broadcast through the facilities of commercial stations from the campus studios of the Communication Center.

Recreation. Leadership training and consultation services are offered to urban and rural communities through the North Carolina Recreation Commission.

Short Courses and Institutes. Short Courses and Institutes are held at the University for business and professional groups interested in intensive training programs.

School Tests and Materials. Most of the better known and most valuable standardized school tests are collected here for prompt distribution. Both time and transportation costs of these tests may be saved by ordering from the Office of School Tests and Materials, Box 1050, Chapel Hill, N. C. A catalogue is available upon request.

The University News Letter, containing the results of studies made of economic and social conditions in North Carolina, is sent free to residents of the state.

For information about any of the above services, write to the UNIVERSITY EXTENSION DIVISION, Chapel Hill, N. C.

CORRESPONDENCE COURSES OFFERED BY NORTH CAROLINA STATE COLLEGE EXTENSION DIVISION

Raleigh, N. C.

(Applications for these courses should be sent directly to North Carolina State College.)

Agriculture

Course	*Credit*
A. I. 310, Animal Nutrition I	2 Semester Hours
A. I. 312, Animal Nutrition II	2 Semester Hours
Hort. 303, Vegetable Gardening	2 Semester Hours
Hort. 313, Home Floriculture	2 Semester Hours
Poul. 101, General Poultry	2 Semester Hours
Poul. 333, Poultry Nutrition	2 Semester Hours
Poul. 401, Poultry Diseases	2 Semester Hours

Rural Sociology

R. S. 301, Sociology of Rural Life	3 Semester Hours

Architecture

Arch. 321, History of Architecture I	2 Semester Hours
Arch. 322, History of Architecture II	2 Semester Hours

Education

Ed. 304, Educational Psychology	3 Semester Hours
Ed. 344, Secondary Education	2 Semester Hours
Ed. 476, Psychology of Adolescence	2 Semester Hours

Economics

Ec. 201, General Economics	3 Semester Hours
Ec. 202, General Economics	3 Semester Hours
Ec. 407, Business Law I	3 Semester Hours

Statistics

Stat. 361, Elementary Industrial Statistics	2 Semester Hours

English

Eng. 111, Composition	3 Semester Hours
Eng. 112, Composition	3 Semester Hours
Eng. 211, Business Communications	3 Semester Hours
Eng. 361, Backgrounds of English Civilization I	3 Semester Hours
Eng. 362, Backgrounds of English Civilization II	3 Semester Hours
Eng. 365, The American Mind (American Literature I)	3 Semester Hours
Eng. 366, The American Mind (American Literature II)	3 Semester Hours
Eng. Ex374, North Carolina Literature	2 Semester Hours
English Review	No Credit

Geology

Geol. 120A, Physical Geology	2 Semester Hours
Geol. Ex. 207, Physical Geography	2 Semester Hours
Geol. Ex. 208, Physical Geography	2 Semester Hours

History

Hist. 101, American Economic History to 1789 ..... 2 Semester Hours
Hist. 102, American Economic History, 1789-1865 ..... 2 Semester Hours
Hist. 103, American Economic History Since 1865 ..... 2 Semester Hours
Hist. 211, The Colonial Period of American History ..... 2 Semester Hours
Hist. 212, History of the United States (Revolution to Civil War) ..... 2 Semester Hours
Hist. 213, History of the United States (Civil War to Fair Deal) ..... 2 Semester Hours
Hist. 221, Modern European History ..... 2 Semester Hours
Hist. 222, Modern European History ..... 2 Semester Hours
Hist. 223, Contemporary Europe ..... 2 Semester Hours
Hist. 306, History of North Carolina ..... 2 Semester Hours
Hist. 320, American Biography ..... 2 Semester Hours
Hist. 360, Recent United States History ..... 2 Semester Hours

Political Science

Pol. Sc. 211, American Government ..... 2 Semester Hours
Pol. Sc. 212, State Government and Administration .... 2 Semester Hours
Pol. Sc. 213, Municipal Government and Administration ..... 2 Semester Hours

Engineering

I. E. 206, Industrial Organization and Management .... 2 Semester Hours
I. E. 207, Industrial Organization and Management .... 2 Semester Hours
Introduction to Ceramic Engineering .....No Credit
Cer. E. 202, Ceramic Materials ..... 2 Semester Hours
Cer. E. 301, Drying Fundamentals and Practice ..... 2 Semester Hours
Metal Enamels .....No Credit
Ceramic Whiteware Bodies .....No Credit
M. E. 101, Engineering Drawing ..... 2 Semester Hours
M. E. 102, Engineering Drawing ..... 2 Semester Hours
M. E. 201, Descriptive Geometry ..... 2 Semester Hours
H. E. 101, Accidents and Their Prevention ..... 2 Semester Hours

Mathematics

Math. 101, First Year Mathematics for Engineers ..... 5 Semester Hours
Math. 102, First Year Mathematics for Engineers ..... 4 Semester Hours
Math. 111, Algebra and Trigonometry ..... 4 Semester Hours
Math. 112, Algebra and Trigonometry ..... 4 Semester Hours
Math. 201, Calculus I ..... 4 Semester Hours
Math. 202, Calculus II ..... 4 Semester Hours
Solid Geometry .....No college credit
Plane Geometry .....No college credit

Practical Technical Courses

Building and Estimating .....No college credit
Land Surveying .....No college credit

Textiles

Tex. 101A, Yarn Principles ..... 1 Semester Hour
Tex. 101B, Yarn Principles ..... 2 Semester Hours
Tex. 201A, Yarn Manufacture II ..... 3 Semester Hours
Tex. 201B, Yarn Manufacture II ..... 4 Semester Hours
Tex. 301A, Yarn Manufacture III ..... 3 Semester Hours
Tex. 301B, Yarn Manufacture III ..... 4 Semester Hours
Tex. 373, Fabric Technology ..... 2 Semester Hours
Tex. 431, Synthetics I ..... 1 Semester Hour
Tex. 471, Color in Woven Design ..... 2 Semester Hours

Modern Languages

M. L. 101, Elementary French	2 Semester Hours
M. L. 102, Elementary French	2 Semester Hours
M. L. 201, French Prose	2 Semester Hours
M. L. 311, Introductory Scientific French	2 Semester Hours
M. L. 105, Elementary Spanish	2 Semester Hours
M. L. 106, Elementary Spanish	2 Semester Hours
M. L. 205, Spanish Prose	3 Semester Hours
M. L. 206, Spanish Prose	3 Semester Hours
M. L. 317, Technical Spanish	2 Semester Hours
M. L. 103, Elementary German	2 Semester Hours
M. L. 104, Elementary German	2 Semester Hours
M. L. 204, German Prose	2 Semester Hours
M. L. 314, Introductory Scientific German	2 Semester Hours

Psychology

Psy. 200, Introduction to Psychology	3 Semester Hours
Psy. 302, Psychology of Personality and Adjustment	3 Semester Hours
Psy. 304, Educational Psychology	3 Semester Hours
Psy. 476, Psychology of Adolescence	2 Semester Hours

Sociology

Soc. 101, Human Relations	1-⅓ Semester Hours
Soc. 102, Human Relations	1-⅓ Semester Hours
Soc. 103, Human Relations	1-⅓ Semester Hours
Soc. 202, General Sociology	2 Semester Hours
Soc. 203, General Sociology	2 Semester Hours
Soc. Ex. 400, Criminology	2 Semester Hours
Soc. 401, Social Pathology	2 Semester Hours
Soc. 402, Sociology of City Life	2 Semester Hours
Soc. 406, The American Family	2 Semester Hours

For further information write to the College Extension Division, North Carolina State College, Raleigh, N. C.

REGISTRATION BLANK FOR CORRESPONDENCE COURSES

Bureau of Correspondence Instruction
University of North Carolina
Chapel Hill, N. C.

This blank is to be filled out completely in applicant's own handwriting. It must be accompanied by check or money order to cover fees. For course fees for non-residents of North Carolina and registration fee for all, see pages 10-11.

In sending this application, I agree to abide by the rules and regulations of the Extension Division as set down on pages 11-12 of the catalogue:

1. Name (in full) ..... Age.....
   Mr., Mrs., or Miss

   Race.....

2. Present Address: .....
   (Street and Number)

   .....
   (City) (County) (State)

3. Permanent Address .....

4. Previous Education .....
   (Be specific, naming degree, institution, etc.)

5. If you have ever registered in any division of this University before, underline which division and give dates:

   Residence Term ..... Summer School .....

   Extension Class ..... Correspondence .....

6. Number and subject of course desired .....

7. Kind of credit desired (mark X): Undergraduate degree credit .....

   Toward what degree? ..... At what institution? .....

   If credit is desired, have you secured the approval of the authorities? .....

   Certification credit ..... Professional credit .....

   No credit ..... Occupation .....

8. If teaching, give KIND of certificate held ..... Class ..... No.....

9. Do you wish to purchase the books through the Extension Division?....

10. I am enclosing $..... for these amounts:
    (Total)

    $.....Registration Fee (Include if not paid during past 12 months)

    $.....Course Fee, $.....Books (Residents of North Carolina should add sales tax for purchased texts.)

Make check or money order payable to the University Extension Division.

REGISTRATION BLANK FOR CORRESPONDENCE COURSES

Bureau of Correspondence Instruction
University of North Carolina
Chapel Hill, N. C.

This blank is to be filled out completely in applicant's own handwriting. It must be accompanied by check or money order to cover fees. For course fees for non-residents of North Carolina and registration fee for all, see pages 10-11.

In sending this application, I agree to abide by the rules and regulations of the Extension Division as set down on pages 11-12 of the catalogue:

1. Name (in full) ..... Age.....
   Mr., Mrs., or Miss

   Race.....

2. Present Address: .....
   (Street and Number)

   .....
   (City) (County) (State)

3. Permanent Address .....

4. Previous Education .....
   (Be specific, naming degree, institution, etc.)

5. If you have ever registered in any division of this University before, underline which division and give dates:

   Residence Term ..... Summer School .....

   Extension Class ..... Correspondence .....

6. Number and subject of course desired .....

7. Kind of credit desired (mark X): Undergraduate degree credit .....

   Toward what degree? ..... At what institution? .....

   If credit is desired, have you secured the approval of the authorities? .....

   Certification credit ..... Professional credit .....

   No credit ..... Occupation .....

8. If teaching, give KIND of certificate held ..... Class ..... No.....

9. Do you wish to purchase the books through the Extension Division?....

10. I am enclosing $..... for these amounts:
    (Total)

    $.....Registration Fee (Include if not paid during past 12 months)

    $.....Course Fee, $.....Books (Residents of North Carolina should add sales tax for purchased texts.)

Make check or money order payable to the University Extension Division.

STUDY OUTLINES

LIBRARY EXTENSION DEPARTMENT

VOLUME XV

North Carolina Writers. Walter Spearman. October 1949. No. 1*
Thomas Wolfe: Carolina Student. Agatha B. Adams. January 1950. No. 2 Cloth, $3.00; paper, $1.50
Adventures in Reading, 24th Series. Mary C. Hopkins. April 1950. No. 3
The South in Biography. Emily Bridgers. July 1950. No. 4

VOLUME XVI

Modern French Literature. Jacques Hardré. October 1950. No. 1
Paul Green of Chapel Hill. Agatha B. Adams. January 1951. No. 2. Cloth, $3.00; paper, $1.50
Adventures in Reading, 25th Series. Mary Cutler Hopkins. April 1951. No. 3
Other People's Lives, Twelfth Series. Cornelia S. Love. July 1951. No. 4

VOLUME XVII

Reading for Freedom. L. O. Kattsoff. October 1951. No. 1
Inglis Fletcher of Bandon Plantation. Richard Walser. January 1952. No. 2 Cloth, $3.00; paper, $1.50
Adventures in Reading, 26th Series. Mary Cutler Hopkins. April 1952. No. 3
American History Through Historical Novels. Walter Spearman. July 1952. No. 4

VOLUME XVIII

North Carolina Authors: A Selective Handbook. October 1952. No. 1 Cloth, $3.00; paper, $1.50
The Great West in Fact and Fiction. Emily Bridgers. January 1953. No. 2
The World of Wonderful Books. Adventures in Reading 27th Series. Mary Cutler Hopkins. April 1953. No. 3
Other People's Lives, 13th Series. Cornelia S. Love. July 1953. No. 4

VOLUME XIX

North Carolina Writers, Revised. Walter Spearman. October 1953. No. 1
Adventures in Reading, 28th Series. Marion Brown. January 1954. No. 2
Plays of Today: 1950–1954. Cornelia S. Love. April 1954. No. 3
Frederick H. Koch: Pioneer Playmaker. Samuel Selden and Mary T. Sphangos. July 1954. No. 4. Cloth, $3.00; paper, $1.50

VOLUME XX

The Ageless and Eternal Sea. Emily Bridgers. October 1954. No. 1
Bernice Kelly Harris. Richard Walser. January 1955. No. 2

Subscription per volume, $3.00; to residents of North Carolina, $2.00. Single copies, $0.75; to residents of North Carolina, $0.50 each. Exceptions: *Thomas Wolfe, Paul Green, Inglis Fletcher, and North Carolina Authors*, as noted above.

Address all queries, requests, orders and suggestions to:
Mrs. Charles Hopkins, *Head*, Library Extension Department
University Library, Chapel Hill, North Carolina

---

* Out of print. Available for lending only.

Printed by
COLONIAL PRESS
Chapel Hill